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Examining Psychosociocultural Influences, Student-Professor Interactions, Racial Identity and Resilience as Predictors of Academic Self-Concept and Academic Achievement of Black Collegians

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Examining Psychosociocultural Influences, Student-Professor Interactions, Racial Identity and Resilience as Predictors of Academic Self-Concept and Academic Achievement of Black Collegians

by

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Dedication

This work is dedicated to my son, Isaiah James Beasley. Your arrival in my life five years ago completely transformed me. I am grateful for all you have taught me and for all the warm memories we have created together. I hope you maintain your bright smile, infectious laughter and loving nature as well as deepen your love of books and reading. I am a better man because of your presence in my life. I sincerely hope you will be able to say the same about me one day. I look forward to seeing you fulfill all of the potential that I see in you. I love you!

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Examining Psychosociocultural Influences, Student-Professor Interactions, Racial Identity and Resilience as Predictors of Academic Self-Concept and Academic Achievement of Black Collegians

by

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This study explores how perceptions of the university environment, cultural congruity, student-faculty interactions, racial identity and resilience affect academic outcomes among Black collegians attending historically White postsecondary institutions. Prior scholarship has traditionally focused on standardized measures when assessing academic outcomes among Black college students. In contrast, contextual variables have been given minimal scholarly attention. Using Pearson's correlations and hierarchical multiple regression, this study examines how perceptions of the university environment, cultural congruity, student-faculty interactions, racial identity and resilience

influence academic achievement and academic self-concept among Black college students.

The sample consisted of 253 Black college students (88 men, 165 women) recruited from historically White postsecondary institutions. Results revealed academic self-concept, resilience (via academic engagement) and racial centrality were significantly correlated with cumulative GPA. Using hierarchical multiple regression, academic engagement and racial centrality predicted a small but significant increase in variance of cumulative GPA above and beyond academic self-concept. Additionally, correlational analyses revealed psychosociocultural influences, student-faculty interactions, and resilience were significantly correlated with academic self-concept. Hierarchical multiple regression found that racial identity, psychosociocultural influences, student-faculty interactions and resilience each accounted for significant variance in explaining academic self-concept.

These findings suggest the need to begin developing a more integrated model that incorporates how race (racial centrality), space (perceptions of the university environment, student-faculty interactions), place (cultural congruity) and pace (resilience via academic and social engagement) influence the outcomes of Black collegians attending historically White educational institutions. Implications of these findings for university faculty, student affairs professionals and mental health professionals are identified.

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Chapter 1

Introduction

Background of the Problem

Within most industrialized nations, educational attainment represents the optimal strategy for ensuring the economic, political, social and cultural posterity of one's group. Given its influence on these essential domains, the academic achievement of African American learners has consistently garnered attention from a diverse range of scholarly and mainstream sources (e.g., Cokley, 2003; McWhorter, 2001). While scholarship on the status and outcomes of African Americans at all educational levels has proliferated in recent years, researchers have increasingly focused attention on the academic outcomes of Black students in postsecondary educational settings (Allen, 1992; Harper, 2006a; Kaba, 2005).

Similar to other racial and ethnic minority groups, the proportion of African Americans in higher education has steadily increased over the past 30 years (Kaba, 2005). According to data compiled by the U.S. Department of Education (NCES, 2011), in 2010 African Americans represented 2.9 million of all students enrolled in degree-granting higher education institutions. This total represents 13.4% of all collegians. Although enrollment figures represent a valuable index for evaluating the progress of Black students in higher education, they, however, only provide the beginning of the story. The six-year graduation rate for Black college students entering tertiary institutions in 2004 actually hovers around 40% (Nguyen, Bibo & Engle, 2012). Given the long-term societal implications of failing to optimize their academic potential, it is prudent to

explore the factors that are linked to improved academic outcomes within this student population.

Bemoaning the contemporary emphasis on traditional cognitive indices (e.g., SAT, ACT), college retention scholars have called for the incorporation of more noncognitive measures to supplement these standardized assessments considering that they can provide a holistic portrait of the students' current scholastic ability and future potential (Sedlacek, 2003). Sedlacek, in particular, posits that a critical component in students' adjustment to college life is how they deal with the noncognitive demands of their respective milieus. He contends that these noncognitive factors are particularly important to the academic progress of students of color.

Sedlacek (2010) listed positive self-concept, the ability to deal with racism, and the presence and availability of supportive peers and faculty as three of the eight noncognitive variables that predict positive educational outcomes among Black collegians. Not only do these variables represent critical supplements to traditional measures of academic merit, but they also highlight the environmental, sociocultural, interpersonal and psychological influences that invested stakeholders must incorporate to understand Black students' educational realities and enhance scholastic outcomes.

Academic self-concept, or the learner's overall self-evaluation of their academic competency and their affective response to these intellectual skills (Lent, Brown & Gore, 1997), represents one noncognitive factor that has received extensive coverage within the extant literature (Bryne, 1984; Cokley, 2002a; Guay, Marsh & Boivin, 2003; Marsh, 1990a, 1992; Rouse-Gordon & Cashin, 2000). In K-20 educational settings, academic

self-concept has repeatedly demonstrated its utility in predicting students' overall scholastic performance when compared to other variables (Cokley, 2002a). Scholars have produced a voluminous body of empirical work that clearly documents the link between Black students' academic self-concept and academic performance (Awad, 2007; Cokley, 2000b; Cokley & Chapman, 2008). Indeed, numerous studies have found a bidirectional relationship exists between academic self-concept and academic achievement; that is, academic self-concept operates as both a cause and effect of scholastic performance (Marsh, Trautwein, Ludtke, Koller & Baumert, 2005). Thus, it is critical to examine academic self-concept as both a predictor and outcome variable in academic matters.

Despite numerous studies correlating academic self-concept to the academic performance of African American tertiary students, only a few studies attempt to explicate predictors of academic self-concept for these learners. Unlike predictors of grade point average (GPA), predictors of academic self-concept have received limited coverage in the literature. Thus, more investigations exploring the impact of environmental, sociocultural, interpersonal and psychological factors on both of these academic outcomes within this group are needed (e.g., Cokley, 2000a; 2002a).

Multicultural scholars note that student outcomes are generated within sociocultural contexts that must be accounted for to understand the academic outcomes of African-descent individuals (Cokley, 2006; Shujaa, 1994). These scholars have challenged researchers to develop and utilize more complex, multidimensional models that explicate the psychological, sociocultural, and environmental factors influencing Black students' academic identities and their academic achievement. This

multidimensional approach is a prerequisite to fashioning culturally appropriate educational interventions that address the unique concerns of this group.

In an effort to account for the psychological, social and cultural aspects of minority student success at historically White institutions, Gloria and Rodriguez (2000) introduced the psychosociocultural framework. Unlike mainstream models of college student success (e.g., Tinto, 1975; 1993), this theoretical framework explicitly centers the unique experiences of collegians of color within the student achievement, retention and graduation process. It examines these students' perceptions of the university environment and feelings of cultural match within this milieu as well as assessing how racial identity affects students. It also incorporates the relationships diverse students have with their peers and professors in the college process and highlights the personal resources students bring from their cultural groups (Gloria & Castellanos, 2003).

Together, perceptions of the university environment, cultural congruity, student-faculty relationships, racial identity and academic resilience, among other variables, are hypothesized to provide a more accurate understanding of the contextual noncognitive factors that influence the academic success of students of color in historically White educational spaces.

Researchers have increasingly focused on African American collegians' perceptions of the campus environment as an important noncognitive variable related to academic adjustment, identity and subsequent performance (Allen, 1999). Over thirty years of quantitative and qualitative data confirm that African American collegians on historically White campuses endorse more negative appraisals of the setting and report

greater rates of racial mistreatment when compared to other students of color and their White peers (D'Augelli & Hershberger, 1993; Harper & Hurtado, 2007; Hurtado, 1992; Love, 2009; Sedlacek, 1987; Smedley, Myers & Harrel, 1993). These negative perceptions of the university milieu have been shown to decrease academic motivation and influence scholastic performance in this group (Osborne & Walker, 2006). Accordingly, the influence of this environmental variable should be examined when examining Black students' academic outcomes.

Cultural congruity represents another noncognitive factor identified by the psychosociocultural framework that is associated with the scholastic outcomes of African American collegians. Cultural congruity refers to the students' perceptions of cultural match between themselves and the cultural norms, values and practices of the university (Gloria & Robinson Kurpius, 1996). Gusa (2010) argues that the cultural climate at historically White educational institutions derives from a White, male, middle-class worldview, which can create cultural conflicts for those learners whose identities do not align with these characteristics (Sue & Sue, 2003).

Per the psychosociocultural model (Gloria & Castellanos, 2003), the absence of cultural congruity foreshadows lower rates of academic performance and academic persistence among students of color generally (Castellanos & Gloria, 2007) and African Americans in particular (Gloria, Robinson Kurpius, Hamilton & Willson, 1999). When combined with perceptions of the university environment, evaluations of cultural congruity provide an effective way to gauge how Black students feel about their learning

environment. These perceptions can then be evaluated for their association with and influence on the academic self-beliefs and academic performance of Black learners.

Student development theorists have also documented the importance of student-faculty relationships on academic self-concept and concomitant academic outcomes of Black students. For African American collegians, faculty support and encouragement is significantly correlated with Black students' intellectual self-concept and academic achievement (Cole, 2011). Eschewing the traditional focus on the quantity of student-faculty interactions, Cokley and his colleagues (2006) showed that academic performance was significantly linked to specific dimensions of student-professor interactions. Two dimensions of student-faculty relationships--respectful and caring relationships with professors--can be critical in the reduction of racialized stigma Black students experience, improve perceptions of campus climate, enhance academic self-concept, and assist students in the transition through the educational pipeline (Cohen, Steele & Ross, 1999). Thus, student-faculty relationships constitute a critical component in the overall postsecondary experience of Black collegians and positively influence both academic self-concept and GPA.

Despite the plethora of campus climate research documenting Black students' negative appraisals of the cultural climate at historically White universities, many Black collegians successfully navigate these environments and persist to graduation. Unfortunately, given the deficit-oriented lens often utilized when researching Black learners, limited insight is available on the mechanisms that undergird Black students' academic success and resilience despite environmental, sociocultural, interpersonal and

psychological challenges in monocultural educational spaces. Although resilience scholars primarily concern themselves with illuminating the mechanisms by which some students surmount barriers to which other similar individuals succumb (Rutter, 1987), they have not focused much attention on the processes that facilitate academic resilience among college students in general and Black collegians in particular. Increased awareness of the mechanisms of academic resilience and their impact on academic self-concept and academic achievement provides educational stakeholders with a valuable tool to stimulate Black students' optimal academic outcomes.

When examining the experiences and outcomes of African American collegians attending historically White educational institutions, it is critical to examine identity-based variables as they likely impact these outcomes and can provide information on intragroup differences while on campus. Perceptions of university environment, cultural congruity, student-faculty relationships and resilience for Black collegians on predominately White campuses are likely affected by racial identity variables. Depending on how individuals define themselves in relation to their racial group membership on a daily basis (e.g., racial centrality), one's perceptions and subsequent experiences may be influenced. While racial identity represents one of the most researched psychological variables among Black Americans (Cokley & Vandiver, 2011), one recent development in racial identity research has been to explore dimensions of racial identity. This approach allows researchers to garner a better understanding of Blacks see race influencing their lives (Sellers et al., 1998). As such, the current study focuses on racial centrality.

In summary, the psychosociocultural framework encourages researchers to examine the noncognitive influences that affects the academic outcomes of Blacks in higher education (Gloria & Castellanos, 2003). The proposed study will examine the impact of perceptions of the university environment, self-reported cultural congruity, the quality of student-professor interactions, racial centrality and academic resilience on the academic self-concept and scholastic achievement of African American collegians attending historically White educational institutions. Although predictors of academic performance have been exhaustively explored, fewer studies focus on predictors of academic self-concept despite its close relationship to salubrious educational outcomes. A thorough examination of the impact of these contextual factors on the academic self-concept and achievement of Black collegians represents a critical research endeavor.

Theoretical Framework

Gloria and Rodriguez (2000) proposed a multidimensional theoretical model that incorporates psychological, social and cultural factors to understand students of color experiences at historically White institutions. Originally formulated to explain the experiences of Latino/a collegians, the psychosociocultural model has been utilized to analyze the experiences of African Americans students and provides a valuable theoretical lens for understanding Black students' educational outcomes (Gloria & Castellanos, 2003). The psychosociocultural model posits that perceptions of the cultural environment and students' evaluation of their cultural fit within it plays a critical role in the academic process for students of color (Castellanos & Gloria, 2007). While it does not specifically focus on how these variables impact learner's academic self-concept, it

suggests that academic self-beliefs are likely to be influenced by these environmental and sociocultural factors.

Moreover, this theoretical framework articulates that student-faculty relationships represent another influential factor in generating positive outcomes for Black students in monocultural environments (Gloria & Castellanos, 2003). In particular, faculty members are viewed as an essential agents in the successful adjustment to the college campus and the bolstering of students' academic identities and performance. Cokley et al.'s (2004) comprehensive framework of student-faculty relationships dovetails nicely with the psychosociocultural model as it examines how specific dimensions of student-faculty interactions relate to academic self-concept and academic performance among collegians.

Carlson's (2001) focus on the mechanisms of academic resilience among college students is a sorely needed addition to higher education scholarship and aligns with the psychosociocultural framework. Carlson's framework elucidates the mechanisms associated with resilience among college students thereby providing stakeholders with a strengths-oriented approach to understanding and intervening with Black college students. Sellers and colleagues (1998) multidimensional model of racial identity provides the final theoretical input. With its phenomenological approach to understanding racial identity, the MMRI allows for an personalized understanding of how racial identity is implicated in the academic process.

Significance of Study

Given the use of a multidimensional model that attempts to account for the confluence of environmental, sociocultural, interpersonal and psychological variables,

this study better represents the complex and nuanced nature of the sundry influences on Black students' academic self-concept and learning outcomes. While educational researchers have focused much attention on factors associated with the prediction of academic performance, less scholarship has attempted to identify the predictors of academic self-concept despite its documented importance in educational settings. Considering the symbiotic relationship that exists between academic self-concept and academic achievement, exploration of the factors that influence these two variables can provide numerous benefits. As scholars explicate the multiple contextual factors influencing academic self-concept and achievement among Black postsecondary students, we are positioned to generate better educational interventions and fully realize the full academic potential of this group.

Organization of Proposal

Chapter One provides a brief overview of the variables under review. Chapter Two provides a comprehensive discussion of the extant literature on academic self-concept and its relationship to environmental, sociocultural, interpersonal and psychological factors. Scholarship exploring the influence of perceptions of the university climate, cultural congruity, student-faculty relationships, racial centrality and resilience on the academic self-concept and academic achievement of African American collegians will be explored in this chapter. Chapter Three presents the research methodology and statistical techniques that will be used to answer this study's hypotheses. Chapter Four provides the analyses of the collected. Chapter Five reviews the

results, highlights limitations of the study and provides implications of the study for educational stakeholders.

Chapter 2

Review of Relevant Scholarship

African Americans in Educational Settings

Historically, the education of individuals of African descent in America has not represented a pressing national and state concern. Indeed, historical records reveal that the widespread instruction of African individuals was vigorously opposed due to its potential emancipatory influence (Du Bois, 1935; Woodson, 1968). Enslaved Africans who could read were instrumental in the planning and execution of violent uprisings and the subsequent ability to escape bondage successfully (Woodson, 1998).

In order to justify the economic, social, political, and cultural exploitation and subjugation of unpaid African labor, European Americans concocted a racial hierarchy that positioned themselves at its apex and placed Africans at its foundation (Smedley & Smedley, 2011). Resolving the dialectical tension between the nation's rhetoric of freedom and equality for all and the concomitant enslavement of African individuals, a variety of unsavory practices were designed to ensure White American's racialized domination. These practices included systematically destroying indigenous African languages, eradicating ethnic/tribal cultural practices, and challenging native values in an effort to impose a Eurocentric worldview on African (and other non-White) peoples (Kambon, 1998). Throughout the Maafa (e.g., the African Holocaust), which includes the brutal enslavement of African peoples for over 250 years, 100 years of subsequent racial apartheid and concomitant White terrorism from federal, state, and local government officials in concert with many White citizens (e.g., Blackmon, 2008; Dray, 2003; Jaspin,

2008; Lipsitz, 2006), educational attainment among Blacks remained a primary objective for surviving and transcending these oppressive conditions and attaining eventual economic, political and social liberation (Franklin & Higginbotham, 2010).

Contrary to the "sincere fiction" of continuous progress in American race relations (Feagin, Vera & Imani, 1996; Feagin & Sikes, 1995), the educational journey of Blacks has been rife with pitfalls and setbacks. Post-emancipation, the lack of concern for providing quality education to North America's former free labor supply persisted (Anderson, 1988; Watkins, 2001). Nevertheless, African Americans fought to secure funding and facilities for Negro schools and teachers shortly after their emancipation (Anderson, 1988). Historians note that these efforts to establish scholastic institutions reveal the importance of education for recently freed Africans. Predictably, various barriers were erected to ensure African-descent individuals continued to receive subpar instructional materials, unequal educational funding and defective school facilities compared to their White peers (Anderson, 1988; Du Bois, 1935; Woodson, 1998). Many of the White architects of Black education designed the schooling process to maintain the White supremacist status quo that characterized America's founding and its subsequent policies (Du Bois, 1935; Watkins, 2001; Woodson, 1968). A cornucopia of scholarly work suggests that the legacy of these previous racialized disparities and mistreatment persist to this day in various U.S. institutions, including in education (e.g., Brown et al., 2003; Lipsitz, 2006; Oliver & Shapiro, 2006; Shapiro, 2005; Steinhorn & Diggs-Brown, 2000; Wise, 2010).

Through decades of struggle in the face of long odds, African Americans forced open the doors of educational opportunity. At all educational levels, Blacks fought to earn access to educational spaces that had previously been reserved for Whites only. Despite recalcitrant opposition, by the early 1970's Black learners began to realize tangible gains in the protracted freedom struggle for equal educational opportunities. Around this time, Black students begin to enter college campuses in droves (Allen, 1992). Black student enrollment at historically White campuses increased while it precipitously declined at historically Black educational institutions during this period (Allen, 1992). Concurrent with the increased enrollment of Black students, researchers begin to explore the outcomes of Black students on these campuses (Allen, 1988; Fleming, 1985).

For more than three centuries, White Americans had informed African descent individuals of their supposed genetic--and later cultural--inferiority to the members of the White race. Despite several educational victories in obtaining access to postsecondary schooling opportunities, some scholars worried that the cumulative effects of this White supremacist propaganda would have a deleterious influence on the academic identity and self-beliefs of African American students (e.g., Clark & Clark, 1940; Goffman, 1963). While early fears concerning poor self-concept among Black learners were not substantiated, this brief historical overview illuminates the historical and sociocultural context within which the current discourse on academic self-beliefs, identity and scholastic achievement among African American learners must be situated.

Self-Concept

Marsh (1990a) states that self-concept ranks among one of the oldest constructs within psychology. Since its introduction into the psychological literature, psychologists and scholars from multiple disciplines have worked to elucidate the powerful influence that self-perceptions have on various domains of learners' lives (James, 2007; Marsh, 1990b). As a testament to its valued role in educational settings, researchers continue to study this construct more than 120 years after its introduction in William James's seminal textbook.

Marsh (1990a) reported that self-concept represents "a person's perceptions of him/herself. These perceptions are formed through experience with, and interpretations of, one's environment. They especially are influenced by evaluations by significant others, reinforcements, and attributions for one's own behavior" (p. 83). Self-concept has also been defined as an individual's perception of their competence in a particular domain (Osborne & Jones, 2011). One's self-beliefs are heavily influenced by environmental and intrapersonal factors, such as interactions with, and interpretations of, one's micro and macro contexts, evaluations and reinforcements by important persons, and one's behavior attribution style (Osborne & Jones).

Although self-concept constitutes a relatively old construct within psychology, its early history was characterized primarily by theoretical writings and conflicting empirical findings. Based on the shortcomings identified in their comprehensive review of the extant literature, Shavelson, Hubner and Stanton (1976) crafted a transformative treatise on self-concept that radically altered the subsequent study of this variable. Challenging

early self-concept theorists who argued that self-concept represented a one-dimensional construct (James, 2007), Shavelson et al. proposed that it contained multiple dimensions. Shavelson et al. delineated the following characteristics of self-concept: it is organized; multifaceted; hierarchical; stable; differentiated; and contains descriptive and evaluative components (Bryne, 1984). These characteristics informed the conceptualization of their theoretical model.

Shavelson et al. (1976) formulated an integrated theoretical model of self-concept. They theorized that self-concept represented a multidimensional, hierarchical construct. Positioning global self-concept at the hierarchy's apex, this model posits that overall self-concept can be divided into two separate constructs: academic and non-academic self-concepts. It postulated that academic self-concept could be further subdivided into a variety of relevant content areas based on school subjects (e.g., math, reading, social studies). The model also theorized that non-academic self-concept branched out to encompass social, emotional and physical self-concepts (Shavelson et al.). Shavelson et al.'s model represented the first salvo in subsequent research efforts that eventually reformed and advanced the study of self-concept.

Through their international collaboration, Marsh and Shavelson (1985) generated a revised theoretical framework for understanding self-concept. The revised model retained the multidimensionality of self-concept originally postulated by Shavelson and his colleagues (1976), but it incorporated a more differentiated academic self-concept. Within the revised Marsh/Shavelson model, academic self-concept was represented by two factors, Math/Academic and Verbal/Academic self-concepts, rather than by one self-

concept factor. Later studies (Marsh, Bryne & Shavelson, 1988; Marsh, 1990b) supported these changes to the original Shavelson et al. theoretical model.

Consequent to these innovative theoretical updates and positive preliminary empirical support, a dramatic explosion in scholarly interest and research on self-concept was witnessed. In her review of the emerging research on self-concept, Bryne (1984) found that the increased scholarship in this area could be classified as either between-network or within-network studies. Within-network studies of self-concept analyze the internal structure of self-concept, whereas between-network research focuses on the relationship between self-concept and other relevant constructs, such as motivation, self-efficacy and achievement. The majority of available scholarship on self-concept can be classified as between-network studies (Bryne, 1984).

Within educational settings, between-network studies on academic self-concept abound as self-concept has been shown to influence students' scholastic outcomes. Theoretically, positive self-concept increases the likelihood of positive academic outcomes, whereas negative self-concept heightens the probability of negative scholastic outcomes (Osborne & Jones, 2011). Adding complexity to the narrative, self-concept researchers later discovered that the use of domain-specific instruments to assess academic self-concept provided better prediction of scholastic outcomes over the use of general self-concept measures (Byrne, 1984; Cokley et al., 2003; Cokley & Awad, 2008). Several studies suggest that general self-concept is weakly linked to academic achievement due to the multidimensionality of this construct (Bryne, 1984). Marsh's (1990b) analysis provided supporting empirical evidence for this claim. More recently,

Huang's (2011) meta-analysis of 39 longitudinal studies of the relations between self-concept and achievement found weak associations between general self-concept and academic performance. Taken together, these studies support the need to specifically examine the academic aspects of self-concept and its relationship with academic performance.

Academic Self-Concept

Defining Academic Self-Concept

Academic self-concept has been defined as an individual's perceptions of their competency in academic settings (Marsh, 1990a). Bong and Shaalvik (2003) report that academic self-concept "reflects an aggregated judgment or overall impression of one's competence in given academic domains" (pg. 29). It typically incorporates evaluative and comparative aspects, particularly focusing on the individual's scholastic performance in relation to their peers' performance in similar settings (Marsh, 1990a). Although academic self-concept is similar to other constructs in educational research, it contains unique features. Bong and Shaalvik (2003) distinguish academic self-concept and academic self-efficacy by noting that, whereas academic self-concept is "past-oriented, stable over time, and resistant to change," academic self-efficacy, or the learner's beliefs about their ability to competently complete specific academic tasks at a designated level, is context-dependent, and thus is more fluid. Academic self-concept, in contrast, represents a cumulative or overall appraisal of one's academic capabilities. A recent study documented the predictive power of academic self-concept over self-efficacy in scholastic settings (Skaalvik & Skaalvik, 2004).

Self-esteem represents another variable positively associated with academic self-concept (Alves-Martins, Peixoto, Gouveia-Pereira, Amaral & Pedro, 2002). Self-esteem differs from academic self-concept as it provides a general evaluation of the individual that may or may not include an evaluation of their abilities in an academic setting. Marsh and O'Mara (2008) showed that whereas academic self-concept was positively associated with academic achievement, global self-esteem represented a less useful predictor of academic performance. Awad (2007) found that global self-esteem was not a strong predictor of academic performance for Black collegians. She suggested that academic self-concept represented a more proximal predictor when compared to self-esteem for these students. Although self-esteem and self-efficacy are important constructs to investigate in educational settings, academic self-concept appears to be a more useful construct given its documented ability to predict academic outcomes more accurately.

Self-concept scholars have long debated the causal ordering of academic self-concept and academic achievement (Marsh, 1990a). Originally, researchers concentrated on two lines of research to settle this contentious debate. In their research, Calsyn and Kenny (1977) focused on the self-enhancement and skill development models. According to the self-enhancement model, self-concept determines subsequent scholastic performance. The skill development model, in contrast, contends that enhanced academic self-concept follows higher academic performance (Calsyn & Kenny).

More recently, the reciprocal effects model has emerged to replace these two models and appears to better explain the unique relationship that exists between academic self-concept and academic achievement. According to reciprocal effects model, a

bidirectional relationship exists between academic self-concept and academic achievement whereby prior levels of academic self-concept is directly related to future levels of academic performance and prior scholastic performance is linked to subsequent academic self-concept (Marsh & Yeung, 1998). Guay, Marsh and Boivin (2003) contended that the reciprocal effects model best explained the relationship between these two variables. Indeed, Marsh and Yeung (1998) argued that the reciprocal effects model represented the seamless marriage of the self-enhancement and skill development models. Providing empirical support for the reciprocal effects model, Marsh and O'Mara (2008) analyzed longitudinal data from 2,213 secondary students and discovered that positive reciprocal relationships existed between academic self-concept and academic achievement. The presence of this symbiotic relationship illustrates the importance of simultaneously assessing predictors of academic self-concept and academic achievement.

Although predictors of academic self-concept have not garnered the same scholarly focus as predictors of academic performance, educational stakeholders should consider this area with more care. Developmentally, postsecondary education presents new identity challenges for many emerging adults. These identity challenges may be exacerbated by the cultural milieu encountered by students of color at historically White educational institutions (Smedley, Myers & Harrell, 1993). A better understanding of how contextual factors in this novel environment impacts Black learners' academic self-concept is a critical endeavor. Identifying contextual predictors of academic self-concept and performance provides critical information for reducing adverse educational

outcomes, such as higher rates of academic disidentification (e.g., Cokley & Moore, 2007) and premature withdrawal.

Despite the significant theoretical and empirical changes in the (academic) self-concept literature, several limitations characterize this body of work. One of the primary limitations of the early empirical research and later theoretical revisions of self-concept in general and academic self-concept in particular is that the majority of the research has been conducted with predominately international (mostly European) and adolescent samples (Guay, Marsh & Boivin, 2003; Marsh, 1990a; 1992; Marsh, Byrne & Shavelson, 1988). This (over)reliance on European and adolescent samples characterizes even some of the most recent self-concept research, with a few notable exceptions.

S. Sue (1999) harshly reprimanded researchers who rely on homogenous, Caucasian samples in the creation of psychological and educational knowledge since these researchers typically fail to acknowledge that their racially uniform samples represent a potential validity concern, particularly in an increasingly diverse educational climate. Many self-concept scholars rarely addressed the limited external validity of their findings (Marsh, 1990a). Some of these researchers appear to have assumed generalizability was present sans empirical documentation of it. Privileging internal validity over external validity represents one of the limitations of the (academic) self-concept literature in particular and psychology in general (Hall, 1997; S. Sue, 1999).

The other limitation of the extant (academic) self-concept literature has been its reliance on samples of compulsory-age learners with minimal scholarly attention devoted to postsecondary learners (Guay, Marsh & Boivin, 2003; Marsh, 1990a, 1992; Marsh &

O'Mara, 2008). Given the interdependent relationship between academic self-concept and academic outcomes, this dearth of research knowledge on college students is highly problematic. While limited scholarship exists on the academic self-concept of collegians (Reynolds et al., 1980; Reynolds, 1988), it has only been in recent years that sustained attention has been given to research inquiries in this area (e.g., Cokley & Patel, 2007). As self-concept researchers have expanded the study of academic self-concept to include tertiary student samples, useful insights have been gleaned.

Academic Self-Concept and African Americans

Considering the centuries of racist propaganda concerning the biological and currently the cultural inferiority of Black learners, scholars have focused attention on the manner in which this history affects contemporary Black learners (Cokley, 2006). These researchers suggest that the development of positive academic self-concept among African American students is challenged by Eurocentric miseducation (Ladson-Billings, 1992; Shujaa, 1994), limited (same-race) instructors who conceive of education as a liberatory process (hooks, 1994), and alienated or disengaged parents and peers (Osborne, 1997; 1999). hooks details how developing a positive academic self-identity in the face of a White-centric curriculum can be a daunting task, particularly when one's parents, peers and instructors have not received any education on developing a positive Black scholar's identity. Academic self-beliefs in historically marginalized populations constitute critical outcomes to assess based on these sociohistorical realities.

Among African American learners, academic self-concept has been shown to be a strong predictor of academic outcomes (Awad, 2007; Cokley, 2002a; 2002b; Cokley et

al., 2011). Despite the limited focus on external validity by early (academic) self-concept researchers (e.g., Reynolds, 1988), other researchers have examined academic self-concept using African American samples. These investigators have reported evidence consistent with prior theoretical postulations and subsequent empirical evidence endorsing the superiority of a domain-specific measure of academic self-concept over a global measure of self-concept when researching African American students (Cokley, 2002a; Cokley & Moore, 2007).

In one of the earliest studies of academic self-concept using Black adolescents, Mboya (1986) found that while a non-significant relationship existed between general self-concept and academic achievement, a significant association existed between academic performance and academic self-concept. Among a sample of low-income students and students of color, academic self-concept predicted academic success over three semesters better than standardized assessment measures and was significantly correlated with academic persistence for these learners (Gerardi, 1990). Controlling for prior academic achievement in a racially mixed sample of first-generation, low-income college freshmen, House (1997) demonstrated that even for academically underprepared students, higher academic self-concept was significantly correlated with better performance in introductory mathematics course, whereas students' achievement-related expectancies were not. These findings mirror the conclusions of prior research indicating that incorporating domain-specific self-concept instruments produces optimal results in the prediction of academic outcomes (Marsh, 1992).

While many of the studies of academic self-concept have been conducted with elementary and secondary school-age students, several studies have documented the importance of academic self-concept for Black learners at the postsecondary level (Awad, 2007; Cokley, 2000b; 2002a; Cokley & Chapman, 2008; Cokley, Komarraju, King, Cunningham & Muhammad, 2003; Cokley & Moore, 2007; Fortson, 1997). In an early investigation of academic self-concept among a sample composed exclusively of Black undergraduates, Cokley (2000b) found that GPA represented the best predictor of academic self-concept for Black students attending historically White institutions, while student-faculty relationships provided a better predictor of GPA for Black students at historically Black institutions. In a subsequent multi-institution study of Black and White students at Historically Black Colleges and Universities (HBCUs) and predominately White institutions (PWIs), Cokley (2002b) reported significant differences in academic self-concept based on two background variables (race and institution type). African American students, on average, endorsed higher levels of academic self-concept than their White counterparts and Black students attending HBCUs possessed higher academic self-concept than those Black students attending PWIs in the sample.

In addition to institutional differences in academic self-concept, exploration of intragroup differences has consistently found gender differences in academic self-concept (Cokley, 2001; 2002a; Cokley & Moore, 2007). These studies provide strong evidence that African American female collegians possess higher academic self-concepts than their same-race male counterparts. Clearly, academic self-concept is an important variable for understanding Black collegians.

Measuring Academic Self-Concept

Although recent advances in self-concept research suggest a multidimensional approach to assessing academic more accurately reflects academic self-concept, this study utilizes a one-dimensional approach for measuring academic self-concept (e.g., Reynolds, 1988). Given the diverse academic programs pursued by Black collegians, it is unfeasible to focus on the sundry subject areas that characterize academic self-concept for a college population. Assessing the multidimensionality of academic self-concept is much more challenging in a postsecondary setting and is rarely attempted by other leading academic self-concept scholars (e.g., Cokley, 2002a). Cokley argues that garnering an overall understanding of students' academic self-beliefs is a fruitful research endeavor.

Derived from the original Marsh/Shavelson model and constructed to assess the domain-specific aspects of academic self-concept, the Academic Self-Concept Scale (ASCS; Reynolds et al., 1980; Reynolds, 1988) represents a highly utilized instrument for examining academic self-concept among collegians. Reynolds and colleagues conducted their initial validation of the ASCS on 427 undergraduates. They created an initial pool of 59 items, with 19 of these initial items deleted from the final scale. The authors did not provide a demographic breakdown for the students in their preliminary sample. Construct validity of the ASCS was demonstrated through positive correlations with GPA and the Rosenberg Self-Esteem Scale, which assesses global self-concept. Regression analysis revealed that the GPA, overall self-concept and SAT scores were significant predictors of academic self-concept, with these three variables explaining 67% of the variance in

academic self-concept scores. In a follow-up analysis, Reynolds (1988) provided additional data on the psychometric properties of his instrument. Reynolds's confirmatory sample included 589 collegians, with Black students representing 7% of the sample. His data revealed strong test-retest reliability and a robust internal consistency estimate of .92. Gender differences also emerged in this sample with women reporting higher academic self-concept scores than their male counterparts.

In the validation study, Reynolds' (1988) factor analysis of the ASCS revealed a seven-factor solution, which explained 52.6% of the variance in academic self-concept scores. Reynolds labeled the seven factors: Grade and Effort; Study Habits/Organizational Self-perceptions; Peer Evaluation of Academic Ability; Self-confidence in Academics; Satisfaction with School; Self-doubt Regarding Ability; Self-evaluation with External Standards. Subsequent regression analyses indicated that the ASCS was a strong predictor of GPA, self-concept and locus of control. Negative correlations between the ASCS and social desirability were found. Taken together, these data provide strong evidence for the utility of the ASCS to assess academic self-concept with college students.

Multicultural experts have emphasized the importance of reassessing the factor structure of instruments to evaluate whether the underlying factor structure is replicated with persons of color, particularly when instruments are developed and validated on predominately White samples (Cokley & Awad, 2008; S. Sue, 1999). Sans confirmatory empirical evidence, the psychometric properties of the instrument or the appropriateness of its use with ethnic minority populations can be questioned (S. Sue, 1999). Given that

the ASCS was initially developed and validated on a predominately White sample, it is imperative to investigate thoroughly its underlying psychometric properties with Black students to ensure accurate conclusions can be drawn from data utilizing this measure.

Using a sample of 687 Black and White collegians drawn from two HBCUs and several PWIs, Cokley and his associates (2003) conducted a comparative analysis to evaluate the psychometric properties of the ASCS for both of these racial groups. Cokley et al. reported excellent internal consistency for both groups (.95 and .91 for White and Black students, respectively). These scholars reported finding an equivalent factor structure for the ASCS with the White American students in the sample (Reynolds, 1988).

In contrast to the seven-factor solution found for White students in the initial exploratory and confirmatory analyses of the ASCS (Reynolds, 1988; Reynolds et al., 1980), Cokley and his colleagues discovered an eight-factor solution for African Americans. The eight factors, which accounted for 52.5% of the total scale variance, were given the following labels: Self-Doubt Regarding Ability; Study Habits; Evaluation of Academic Ability; Self-confidence in Academics; Negative Performance Expectation; Discouragement about School; Rewarded Efforts; and Satisfaction with Grades. Within this eight-factor solution for Black students, three new factors emerged that were not previously reported in the Reynolds' (1988) analysis (Negative Performance Expectations, Discouragement about School and Satisfaction with Grades).

Based on a nuanced examination of the items comprising the revised underlying factor structure, Cokley and his associates (2003) highlighted unique differences across

racial groups. For example, whereas White students' personal anxieties about their academic abilities were linked to their academic performance, Black students' anxieties were focused more on their prior educational preparation with less attention paid to their current academic performance. Hence, for Black learners, academic self-doubt may be elevated if they feel underprepared to handle collegiate coursework due to less rigorous compulsory training rather than based solely on their current scholastic performance.

Other differences found included that Black students appeared to believe that their full potential may not be reflected in their current academic performance, thus they appear less likely to link self-doubts about their innate abilities to discouragement with higher education (Cokley et al.). Notwithstanding these minor differences, the bulk of the literature suggests that the ASCS possesses strong psychometric properties and thus is an appropriate assessment tool for Black students. However, a shift may be needed in how we discuss our findings due to the unique way Black students interpret the instrument's items.

Extensive research on academic self-concept using a between-network focus has connected this construct to a variety of other psychological variables associated with academic success. This finding is consistent with Byrne's (1984) reports that between-network studies of self-concept are more common in educational settings. Given that academic self-concept can serve as both a predictor and an outcome variable, it has often been used in combination with other educationally relevant factors to predict academic outcomes among Black college students.

Utilizing a sample of 313 African American students, Awad (2007) explored the ability of racial identity, self-esteem and academic self-concept to predict GPA and standardized test scores. Her findings revealed that academic self-concept, rather than self-esteem and standardized test scores, represented the best predictor of academic performance for these students. Analogous results demonstrating the connection between academic self-concept and achievement have been reported in other studies with Black collegians (Cokley & Chapman, 2007). Cokley and Chapman tested a path model using academic self-concept, devaluing academic success, perceptions of caring faculty, ethnic identity, other group orientation and anti-White attitudes to predict academic performance. They showed that academic self-concept has both a direct and indirect influence on students' GPA, with their proposed model explaining 24% of the variance in academic self-concept (Cokley & Chapman, 2007). These findings are consistent with the theoretical contentions of the reciprocal effects model (Marsh & O' Mara, 2008). While these studies demonstrate academic self-concept's importance as both a predictor and outcome variable in educational settings, more work is needed to identify predictors of academic self-concept.

Considering academic self-concept's reciprocal relationship with GPA, illuminating predictors of academic self-concept is a critical endeavor for educational stakeholders. Additionally, while prior studies have found a positive association between academic self-concept and academic performance, these studies have often failed to incorporate a multidimensional approach for understanding these academic outcomes (for exceptions, see Cokley, 2000a; 2000b; 2002a; Komarraju, Musulkin & Bhattacharya,

2010). Furthermore, many of these studies have not examined predictors of academic self-concept as rigorously as they have predictors of academic performance. This omission leaves a gap in our knowledge despite recognized importance of academic self-concept as a critical factor for learners' educational success. Filling this gap will help to illuminate contextual factors that impact both the academic self-beliefs and scholastic performance for Black collegians.

Students' outcomes are not generated within a social, cultural or environmental vacuum, yet only a limited number of prior studies attempt to account for the influence of these other contextual variables on Black students' academic outcomes (Gloria & Castellanos, 2003). Marsh (1990a) highlights that academic self-beliefs are "formed through experience with, and interpretations of, one's environment" (p. 190), thus making the examination of environmental factors apropos. Furthermore, Cokley et al. (2003) encouraged future researchers to explore the "specific cultural factors that influence the formation of academic self-concept in different ethnic populations" (p.720-721).

Heeding this advice, the current study utilizes the psychosociocultural framework to explore the influence of perceptions of campus climate, cultural congruity, student-faculty relationships, racial centrality and resilience on the academic self-concept and academic achievement of Black collegians attending historically White educational institutions. Understanding the links between these environmental, sociocultural, interpersonal and psychological variables and positive academic outcomes provides policy makers, faculty, administrators, parents and students with useful tools to improve the recruitment, retention and graduation of African American collegians. Moreover,

efforts that identify the impact of these variables on Black learners' academic outcomes will likely have a positive domino effect on the educational outcomes of other students of color as well as White students as these students are likely to benefit from proactive changes in the college environment that facilitate the success of Black learners (Chang, 2002).

University Environment

Characteristics of Historically White Institutions

Within all social systems, several key institutions serve to transmit and perpetuate the existing cultural norms, mores and social structure (Giroux, 1983). Educational institutions represent one of the primary socializing agents in most industrialized societies (Friere, 1970; Giroux, 2001). Consequently, these institutions transmit the worldview, values, and culture of the dominant group within the society and serve as microcosms of a society reflecting its indigenous biases and native prejudices (Nash, 1990). Interactions with this powerful socializing agent exerts a significant influence on individual learners as it both creates and shapes subsequent outcomes among different individuals and groups within the society. Socialization into the dominant culture's beliefs occurs through the educational process and continues even within postsecondary educational settings.

In her analysis of the culture of tertiary educational institutions, Gusa (2010) contends that many historically White colleges and universities maintain an institutional culture that validates, reinforces and perpetuates the supremacy of Whiteness in these spaces. Based on her research, she labeled this phenomenon White institutional presence

(WIP), which she argues manifests itself through four vehicles: White ascendancy, monoculturalism, White estrangement and White blindness.

Gusa defined White ascendency as educational practices that facilitate Whites' sense of superiority, entitlement, domination of racial discourse and reports of racial victimization in educational settings. For example, Iverson (2007) notes that affirmative action policy debates in higher education tends to ignore the historical reality of White exclusion of individuals of color and women and instead focuses attention on the harm it could potentially cause White American students. In this way, the unequal representation of White Americans among the student body, faculty and administration in these settings are positioned as normal and policies that disrupt it are portrayed as unfairly disadvantaging White Americans.

Gusa (2010) contended that White ascendency is often tied to monoculturalism, the second attribute of WIP. Monoculturalism highlights expectations of conformity with and deference to the superiority and normality of White cultural values on college campuses. For instance, historians and educators note that the contributions of individuals of color (and women) continue to be minimized, trivialized, and/or completely excluded within many American educational institutions (Banks, 1993, 1995; Brunsma, Placier & Brown, 2012; Loewen, 2007) despite a long history of efforts to diversify the White, male-centric pedagogy (Sue, 2003; Woodson, 1998).

White blindness, the third attribute of WIP, involves the ideology that colorblindness is essential despite the continued existence of racialized outcomes in enrollment, retention, and graduation rates as well as among representation of faculty and

upper-level administrators (Gusa, 2010). In reality, Gusa contends that this racial blindness serves to obfuscate the historical and contemporary racial dynamics that serve to maintain the White status quo, thus ensuring the continuation of White privilege in these spaces (Castagno, 2008). Leonardo and Porter (2010) assert that, "It would be a mistake to regard color-blindness as a non-racial move and more accurate to construct it as a particular deployment of race" (p. 150), particularly in light of the centuries of ubiquitous color-consciousness in the U.S. Hurtado (1992) avers:

> [T]he defense of dominant group privilege…often takes on a sophisticated guise as an expressed concern for the individual that is consistent with prevailing democratic values- so long as one chooses to ignore both the historical and continuous disadvantages under which subordinate groups operate. (p. 545)

This colorblind perspective even infects the research process on the experiences of students of color. Harper (2012b) examined 255 articles in seven leading higher education journals and found that researchers often approached their work with an "anything but racism" approach, frequently utilizing code words to avoid cataloging the full impact of racism on students of color in higher education contexts. Harper continues, "Why is it inconceivable that what a minoritized person occasionally experiences is not a 'chilly climate' but instead a racist environment" (p. 23)? Not only does White blindness contribute to researchers ignoring the daily lived experiences of students of color, it also leaves White Americans disconnected from these knowing about and (potentially) responding to these experiences.

The final attribute of WIP is White estrangement, or the social, physical and cultural segregation of Whites from persons of color, which inhibits interracial interactions and thwarts cross-racial relationships (Gusa, 2010). Participation in an ethnocentric monocultural environment acts to erode diverse opinions and encourages minoritized students to develop values and perceptions that closely align with the patriarchal White perspective prevalent in higher education, thereby reinforcing Eurocentric intellectual domination and hegemony (Fine, 1997). Gusa (2010) contends, "PWIs do not have to be explicitly racist to create a hostile environment. Instead, unexamined historically situated White cultural ideology embedded in the language, cultural practices, traditions and perceptions of knowledge allow these institutions to remain racialized" (p. 465). White estrangement or segregation from the critical perspectives of students and scholars of color allows these practices to not be challenged and interrogated.

Clearly, environmental and sociocultural factors are important factors to consider when evaluating the academic outcomes of Black collegians attending historically White institutions of higher education. Acknowledging that contextual issues are factors that can contribute to the educational success (or lack thereof) among Blacks (Reynolds, 2010), we must closely examine and problematize the educational contexts within which Black learners are being schooled (Beasley, Miller & Cokley, 2014). This process is particularly salient since more Black students are enrolling at traditionally White colleges and universities (Allen, Epps & Haniff, 1991). We must critically interrogate this educational

milieu in order to garner a holistic portrait of the students' academic experience and their concomitant outcomes.

Psychosociocultural Theoretical Framework

Connecting the environmental, social, cultural and academic aspects of college student success, Gloria and Rodriguez (2000) proposed the psychosociocultural model to account for the experiences of students of color in historically White educational spaces. According to the psychosociocultural model, students of color are confronted with conventional college student stressors in their adjustment to college, but they also must deal with other stressors connected to their racial and ethnic group membership (Gloria & Castellanos, 2003; Smedley, Myers & Harrell, 1993). Scholars note that most existing theories of college student retention and development fail to acknowledge and incorporate these additional race-related stressors as critical considerations in the student departure process (Guiffrida, 2006; Tierney, 1999). The psychosociocultural model places a high premium on the inclusion of psychological, social and cultural factors when exploring academic outcomes for students of color (Castellanos & Gloria, 2007). This model recognizes the value of assessing both negative noncognitive stressors (e.g., "cold" campus climates) as well as protective factors (e.g., family and same-race peer support, cultural classes, race-specific student organizations, etc.). This theoretical framework serves as a key component of this research endeavor.

Consistent with Hurtado, Milem, Clayton-Pederson and Allen's (1998) analysis of historically White educational institutions, the psychosociocultural framework implicitly acknowledges the historical and contemporary influences of Whiteness within

educational settings and explicates how it influences students of color and their perceptions of the campus environment. Hurtado et al. (1998) identified four dimensions of the campus environment that intersect to influence outcomes among Black learners:

> The institutional context contains four dimensions resulting from educational programs and practices. They include an institution's historical legacy of inclusion or exclusion of various racial/ethnic groups, its structural diversity in terms of numerical representation of various racial/ethnic groups, the psychological climate of perceptions and attitudes between and among groups, and the behavioral climate dimension, characterized by intergroup relations on campus. (p. 282)

By examining these various aspects of the campus environment, we are able to garner a better understanding of the experiences of Black students in historically White educational spaces. Gloria and Robinson Kurpius (1996) asserted that traditional university assessment tools failed to capture the unique experiences of students of color given that they were created to assess the experiences of White undergraduates. Existing questionnaires rarely assessed minoritized students' perceptions of the university campus or evaluated their sociocultural experiences, which renders them less useful for truly understanding the lived realities of these student populations. Thus, the psychosociocultural framework provides a useful lens to address this oversight and more accurately illuminate the experiences of students of color.

University Environment and African Americans

Campus climate scholars have produced a voluminous literature detailing the negative psychosociocultural experiences of African American collegians at historically White institutions of higher education (Cokley, McClain, Enciso & Martinez, 2013; Edman & Brazil, 2007; Fries-Britt & Turner, 2001; Harper & Hurtado, 2007; Hurtado, 1992; Hurtado et al., 1998; Rankin & Reason, 2005; Solorzano, Ceja &Yosso, 2000). Harper and Hurtado surveyed almost two decades of the existing literature on campus racial climates and affirmed that Black students consistently endorsed the lowest evaluations of the campus environment. Ancis, Sedlacek, and Mohr (2000) reported that, when compared with other racial/ethnic group members and White students, Black students reported experiencing more negative campus encounters, the presence of higher racial and ethnic tension, pressure to conform to racial stereotypes, efforts to minimize expression of group-specific traits (e.g., wearing ethnic apparel, maintaining an Afro or locks), and greater mistreatment by university officials, faculty, and staff.

Despite the presence of this hostile environment, White members of the student body remained oblivious to the plight of their Black peers (Ancis, Sedlacek & Mohr, 2000; Gosset, Cuyjet & Cockriel, 1998; Harper & Hurtado, 2007). Consequent to this mistreatment and the divergent interracial perceptions of the campus, it is not surprising that Black students frequently endorse the highest levels of social alienation and exclusion on historically White campuses (Loo & Rolison, 1986; Worthington, 2008).

Informed by data from focus groups with Black students, Bourke (2010) shared how Black students felt their contributions were marginalized and that their experiences

were devalued in the presence of Whiteness on campus. African American students perceived that White students questioned their entitlement to full participation at these institutions and reported that they witnessed exclusion through a variety of sources on campus, including curricula, interactions with faculty, and school traditions.

In another study drawing on focus group data collected at an elite, predominately White research institution, Solorzano, Ceja and Yosso (2000) found that African American collegians reported feeling invisible and isolated in their classrooms due to the monocultural curricula. They also endorsed feeling denigrated by faculty's prejudices concerning their intellectual abilities and shared that they had experienced a variety of other microaggressions in this context. These negative encounters exact a heavy psychological toll on these students, inducing feelings of self-doubt, frustration, defensiveness, discouragement and, in some cases, exhaustion (Solorzano, Ceja & Yosso).

Taken together, these results provide a context for why Black collegians may experience their campuses more negatively than other members of the student population. The social alienation, cultural marginalization, and concomitant affective overload experienced by African American collegians can reduce Black students' sense of belonging and institutional commitment at many predominately White educational institutions (Johnson, Soldner & Leonard, 2007). These negative experiences detrimentally impact Black students' perceptions of the university environment and their subsequent scholastic outcomes (Wei, Ku & Liao, 2011). Indeed, students who rate their campus climates as unfavorable are at risk for negative outcomes, such as poor academic

self-concept, academic disidentification and eventual early termination (Harris & Duhon, 1999; Osborne & Jones, 2011).

University Environment and Academic Outcomes

Self-concept researchers theorize that global self-concept is influenced by external factors, such as feedback from one's environment regarding competence in a particular domain (Marsh, 1999; Marsh & O'Mara, 2008). Academic self-concept is presumably influenced by these same environmental factors, particularly those environmental cues that bear directly on learners' academic identity (Osborne & Jones, 2011). Social psychologists confirm that individuals for whom negative evaluations and debasement are common experiences are acutely attuned to evidence of this devaluation in new settings (Purdie-Vaughns, Steele, Davies, Ditlmann & Crosby, 2008). These negative evaluations can influence their self-beliefs, particularly if they are experienced by the target group chronically (Major, Spencer, Schmader, Wolfe & Crocker, 1998).

Cokley's (2006) treatise on racialized academic settings highlights how the impact of a pervasive deficit-oriented lens, negative beliefs about Black students' intelligence and chronic miseducation are environmental factors that are rarely examined as influencing Black students' academic self-identity and scholastic performance. Experimental data from social psychologists suggest that devaluing academic domains and disidentification from educational pursuits are potential responses to these types of non-affirming environments (Crocker & Major, 1989; Major, Spencer, Schmader, Wolfe & Crocker, 1998; Schmader, Major & Gramzow, 2001).

The extant literature on academic disidentification or the disconnecting of one's self-appraisal from one's academic performance (Cokley, 2002a; Cokley & Moore, 2007; Cokley, McClain, Jones & Johnson, 2012; Finn & Rock, 1997; Osborne, 1995; 1997) and stereotype threat (Steele, 1992; Steele & Aronson, 1995) highlight how the presence of negative academic stereotypes can detrimentally impact the academic self-beliefs and subsequent scholastic performance of targeted groups. This negative impact is witnessed even among those learners who do not ascribe to stereotypes of their group (Aronson, Fried & Good, 2002) as well as those who are fully committed to their academic programs (Steele, 1999).

Furthermore, the high levels of social alienation and social estrangement African American collegians report can contribute to lower academic performance and higher rates of attrition from these institutions of higher education (Davis, 1994; Suarez-Balcazar, Orellana-Damacela, Portillo, Rowan & Andrew-Guillen, 2003; Suen, 1983). Taken together, these research findings suggest that contextual variables can impact both the academic self-concept and academic performance of Black students. However, a dearth of information that explicitly assesses these experiences and attempts to connect them to academic outcomes exists.

Drawing from the qualitative work of Baron, Vasquez and Valdez (1981) on the experiences of Hispanic students attending an elite PWI, Gloria and Robinson Kurpius (1996) created the University Environment Scale (UES) to assess students of color' evaluation of the campus environment. Initially developed and validated with Hispanic students, the UES has been successfully utilized with other diverse groups. In their initial

study (Gloria & Robinson Kurpius, 1996), the scale had positive correlations with existing university scales and strong internal consistency of .81 was reported. Hierarchical regressions analyses revealed that perceptions of the university environment significantly predicted 25% of the variance in academic persistence scores. In a later study, Gloria and Robinson Kurpius (2001) found that perceptions of the university environment, social support and self-beliefs significantly predicted persistence decisions among American Indian undergraduates.

Similar results were reported in a sample of Asian American collegians, with positive impressions of the university environment and increased self-efficacy positively correlated with higher persistence rates (Gloria & Ho, 2003). In Gloria, Castellanos, Lopez and Rosales' (2005) examination of the persistence rates of Latino undergraduates, results revealed strong associations between university comfort, social support, academic self-beliefs and subsequent persistence. A separate study with Latina postsecondary students revealed that positive perceptions of the university significantly correlated with lower perceived barriers to remaining in college and a tendency to engage in proactive academic coping strategies (Gloria, Castellanos & Orozco, 2005).

Campus climate scholars indicate that the UES is also useful for predicting scholastic outcomes among African American students. A study by the Gloria, Robinson Kurpius, Hamilton and Willson (1999) with a predominately Black sample found that Black persisters endorsed more positive campus evaluations and higher levels of perceived mentorship when compared with same-race non-persisters. Moreover, regression analyses revealed that university comfort variables (e.g., perceptions of

university climate and cultural congruity) positively predicted academic persistence for these students (Gloria et al., 1999).

In a study of perceptions of university environment and help-seeking attitudes among a heterogeneous sample of undergraduates (N = 716), Gloria, Hird and Navarro (2001) reported that racial-ethnic minority students reported more negative evaluations of the campus environment when compared to their White peers. These negative evaluations of the campus were linked with students' help-seeking tendencies. Restricted help-seeking behaviors may be linked to Black students' desire to not confirm others' doubts about their academic abilities, particularly if the needed services are perceived as serving remedial purposes or are deemed to signal that intellectual deficits reside within the student (Steele, 1999). Thus, negative perceptions of the university can influence Black students' willingness to access a variety of academically advantageous resources (e.g., writing center, math tutoring, career counseling center, college counseling center, etc.) in order to protect their academic self-esteem, which will be deleterious to subsequent achievement.

While Gloria and Rodriguez's (2000) psychosociocultural model represents an attempt to account for the role environmental variables play in shaping Black students' academic outcomes, limited empirical data is available to elucidate how environmental factors affect Black students' academic self-concept and academic self-concept, especially at the tertiary level. One limitation of the current literature is that most of the available studies using the psychosociocultural model have targeted persistence attitudes rather than examining the link between perceptions of the university environment and

actual academic performance (e.g., cumulative GPA) and academic self-concept. While it is possible that Black students who perceive their campus negatively can thrive (Akom, 2003; Carter, 2007, 2008; Griffin & Allen, 2006; O'Connor, 1993), the bulk of the available evidence indicates that negative campus climates reduce institutional commitment, negatively influence academic identity, and decrease scholastic performance for some students. Furthermore, these studies often utilize general self-esteem and self-efficacy measures to assess academic self-beliefs. While general self-concept and self-efficacy are important educational constructs, academic self-concept experts (e.g., Cokley, 2002a; Cokley & Moore, 2007) encourage us to utilize domain-specific self-concept measures when working with Black students.

In response to these limitations, the current study will examine the link between perceptions of the university environment and academic self-concept and academic achievement. Considering the numerous environmental challenges documented in the extant literature on Blacks in higher education (e.g., Harper & Hurtado, 2007), it is critical to examine the effect of these contextual factors on Black students' academic self-concept, particularly considering the dearth of scholarship on predictors of academic self-concept. I was unable to locate any prior studies that directly assessed the relationship between academic self-concept and perceptions of the university environment. It will also examine how these evaluations of the university environment impacts academic achievement in a homogenous sample. Rather than using persistence attitudes as an outcome variable, students' actual scholastic performance (e.g., cumulative GPA) will be assessed. This study seeks to fill this gap by investigating the relationship between

evaluations of the university environment and academic self-concept and educational achievement in Black collegians attending historically white universities as well as assess whether evaluations of the university environment predict academic outcomes.

In concert with perceptions of the university environment, another cultural factor identified by the psychosociocultural model that has been theoretically linked with academic outcomes is cultural congruity. The role of perceived cultural congruity on the academic self-concept and academic performance of Black students will now be explored.

Cultural Congruity

Defining Cultural Congruity

As a microcosm of the broader society, the cultural ambience of America's historically white educational institutions reflects the cultural values of the dominant cultural groups--White, middle-class and upper-class, able-bodied, Christian males (Fine, 1997; Guinier, Fine & Balin, 1997; Gusa, 2010; Sue & Sue, 2003). From their positions of power, prestige and influence, the cultural perspective of the dominant group can be easily transmitted through the educational system. Historians, cultural anthropologists and sociologists maintain that the dominant cultural worldview in the United States derives from the amalgamation of Greco-Roman and northern European traditions (Takaki, 1994; Smedley & Smedley, 2011; Sue & Sue, 2003). For almost 400 years, a White supremacist ideology or worldview, defined as the belief that Euro-American-derived culture, ideology, values, behaviors and customs are superior to these characteristics in other American racial or ethnic groups, has reigned in both de facto and

de jure forms, infecting all American citizens with its poison (Brown et al., 2003; Fredrickson, 1981; Lipsitz, 1998; Sue, 2003; Wise, 2010; Woodson, 1998). Cultural scholars also include an emphasis on rationality, empiricism, and mastery and control of nature as components of the Eurocentric worldview (Kambon, 1992). They contend that these values are manifested in American culture through notions of rugged individualism, meritocracy ("the American Dream"), competition ("survival of the fittest"), and the quest for the acquisition of material objects (Myers, 1988; Takaki, 1994; Sue & Sue, 2003). Collectively, these scholars contend that Eurocentric ideology has been, and continues to be, the predominant cultural force in America (Sue, 2003) despite resistance from various minority groups who have fashioned their own unique cultural permutations.

Integrating aspects of their American experiences and their African heritage, Blacks in America have developed unique cultural patterns. While some of these patterns represent both adaptive and maladaptive coping strategies for dealing with the psychological and emotional trauma of intergenerational racial oppression (Richardson & Wade, 1999), others represent traditions passed down from African ancestors. Within many African American communities, there is a focus on kinship and community ties (Parham, Ajamu & White, 2010). While individualistic tendencies are found within many Black communities, there is a strong pull to remain grounded in one's cultural and racial heritage. Another unique aspect of Black life is that many times individuals within the community are treated as family even when no biological kinship exists (Kambon, 1992). For example, an older single male may be referred to as one's "uncle" even though he is

not the brother of one's mother or father. Connected to these fictive kinship ties is the need to be respectful towards one's elders and authority figures. Part of this Black tradition stems from the hierarchical nature of kinship in Africa and was reinforced as a survival strategy in America. For centuries, a Black person deemed to be insolent toward Whites could potentially lose their lives (e.g., Emmitt Till). This pattern is reflected in parenting and attachment styles. Many African American families utilize an authoritarian parenting style, which reinforces obedience to authority figures.

Religiosity and spirituality represent another common thread of cultural heritage that draws many African Americans together. Indeed, religious scholars suggest that African Americans remain the one most religious racial group in the United States (Taylor, Chatters, Jayakody & Levin, 1996). Religion and the communal networks it engenders has been a staple of Black American life for generations (Parham, Ajamu & White, 2010). These patterns challenge the rugged individualism, meritocracy and competition that characterize the European worldview. For some, religious faith can also challenge Eurocentric ideas of empiricism and rationality. Finally, another noteworthy cultural pattern found among many Blacks is a healthy cultural mistrust of White institutions (e.g., education system, police, medical and mental providers, researchers). A long history of abuse, neglect and mistreatment by individuals from these institutions contributes to lower contemporary rates of help seeking even as Blacks have fought to gain admission to these once exclusively White sites.

As America's historically White schools have diversified, traditional values and ways of knowing have been questioned and challenged. Indeed, many of the battles in the

Black freedom struggle have been linked to institutions of higher learning. Minoritized group members have often faced stiff resistance to achieving full inclusion. This resistance has served to maintain the existing cultural status quo.

> Educational institutions "…represent an extreme in American wealth and privilege, are staunch promoters of tradition, and are the rungs to powerful positions in society. Although resistance to change may be greatest at these institutions, they are also birthplaces for progressive thought. Racial tension may be highest in these contradictory environments because institutional commitment to diversity is often ambivalent, mitigated by other institutional actions that systematically exclude minorities and their perspectives." (Hurtado, 1992, p. 561)

This resistance to fully acknowledge and incorporate the diverse heritage of America's learners can contribute to cultural impasses for students of color entering historically White tertiary institutions as they may feel compelled to acquiesce to the White status quo. Institutional policies and practices that favor the social and cultural practices of Whites (intentionally or unintentionally) have the potential to detrimentally impact those students who may feel their cultural values and behavior, history, norms, traditions and ways of knowing are not valued in this learning environment (Diangelo, 2006; Lipsitz, 1995). Minoritized students who feel that their culture is deemed inferior in this environment may experience dissonance within that milieu, particularly if they desire to maintain these vital cultural connections (Gloria & Robinson Kurpius, 1996).

Cultural congruity, or one's sense of cultural match between the values of the college environment and one's cultural values, describes these subjective feelings of

disconnect within the campus environment and it plays a critical role in the adjustment process of students of color on predominately white campuses (Gloria & Robinson Kurpius, 1996; Gloria & Robinson Kurpius, 2001; Gloria, Robinson Kurpius, Hamilton & Willson, 1999). Students of color assess cultural congruity through how well the university's traditions, faculty, student body and administrators mirror the values endorsed by members of their own racial or ethnic group and how the contributions of diverse groups are represented within the collegiate milieu (Gloria & Castellanos, 2003). Therefore, when the university's rhetoric (e.g., inclusive colorblindness) fails to match the campus reality (e.g., lack of diversity in student body and faculty, monocultural curriculum, student racial segregation and tension, racially-charged campus encounters), the possibility for feelings of cultural incongruity and cultural tension is a potential concern for students of color, particularly Black students.

With his keen historical and sociological insight on American race relations, W.E.B. Du Bois (1989) most clearly articulated the cultural tension many African Americans experience in this setting:

> It is a peculiar sensation, this double-consciousness, this sense of always looking at one's self through the eyes of others, of measuring one's soul by the tape of a world that looks on in amused contempt and pity. One ever feels his twoness,--an American, a Negro; two warring souls, two thoughts, two unreconciled strivings; two warring ideals in one dark body, whose dogged strength alone keeps it from being torn asunder. The history of the American Negro is the history of this

> strife,--this longing to attain self-conscious manhood, to merge his double self into a better and truer self. (p. 3)

Although this text was written more than 100 years ago, Du Bois' words retain contemporary currency (despite his reliance on male-centric language). Double-consciousness speaks to the potential for a collective identity crisis in African Americans (and other persons of color) due to the historical and contemporary practice of using White Americans as the gold standard by which others are judged and always found to be lacking. This practice of White supremacy within American institutions demonstrates a lack of appreciation for the unique cultural heritage and historical contributions of African Americans and even Black humanity. Double-consciousness alludes to the internal struggle to unearth, understand and reveal one's true self in spite of the White gaze, separating the racial caricatures projected from the White reflecting pool to appreciate the complex human being that resides within each Black learner. This challenge of sorting out one's cultural identity or finding a cultural fit is a process that occurs across the developmental continuum but may be particularly salient during the emerging adult years.

The typical identity challenges associated with healthy development among college-bound Blacks can be exacerbated by entrance into historically White college campus. In concert with conventional college adjustment issues, Black students face cultural challenges associated with their minoritized status (Smedley, Myers & Harrell, 1993).

While student development scholars have detailed the important role academic and social integration play for optimal outcomes of students (Tinto, 1993), these mainstream models typically fail to acknowledge the unique cultural challenges faced by Black students in predominately White educational spaces when attempting to make this transition nor do they assess how the pervasive Whiteness of these settings affects Black collegians. Cultural congruity gives voice to these concerns; in fact, the experience of "juggling two cultures" is a commonly endorsed challenge among students of color (Fiske, 1998, p. 31). While structural diversity (e.g., the diversity of the student body) at postsecondary institutions has increased over the past few decades, research suggests that these demographic shifts have not occurred sans White American resistance to maintain the cultural status quo; the shift to a pluralistic cultural perspective is still under construction in the nation's institutions of higher learning, which makes cultural congruity a pertinent research topic.

In their study of the unique cultural perspectives of 7,347 White and students of color attending ten geographically diverse colleges and universities, Rankin and Reason (2005) documented several notable cultural differences that existed between these two groups. Rankin and Reason reported that students of color were significantly more likely to perceive their classrooms as less welcoming of cultural differences and less accepting of non-White individuals, and contend that the curriculum failed to reflect the narratives of marginalized populations when compared to their White peers. Whereas White students in this study perceived the campus racial climate as improving, students of color endorsed that they believed the climate was actually becoming more hostile.

Furthermore, students of color concurred that more attention to issues of race and racism, more cultural sensitivity workshops and required ethnic studies courses for students, faculty and staff would dramatically improve their campus experience, while White students believed these color-conscious measures would increase racial tension on campus (Rankin & Reason). Other empirical evidence suggests that the current push for racial colorblindness may actually serve to curtail viable avenues for addressing extant racial inequities and restrict the airing of salient cultural concerns of diverse students (Richeson & Nussbaum, 2004).

Taken together, the results from these studies suggest that the cultural needs of Black students are likely to be unmet on many college campuses and that they are likely to encounter resistance from White students and professors, even when they have the courage to voice their unique cultural concerns. In a White-dominated setting that espouses colorblindness, the cultural perceptions and experiences of Black students are likely to be discounted and practices Black students believe would help to address these concerns are frequently ignored, thereby reducing feelings of cultural fit within the university setting (Rankin & Reason, 2005).

Cultural Congruity and Academic Outcomes

According to the psychosociocultural theory, the psychological, social, cultural and environmental contexts of historically White institutions must be assessed when evaluating the outcomes of students of color (Gloria & Castellanos, 2003). A critical component of this multidimensional approach is evaluating the cultural atmosphere to gauge how students perceive their match within the existing structures. Industrial-

organizational psychologists empirically substantiate the importance of person-environment fit (Feldman, Smart & Ethington, 2004; Gilbreath, Kim & Nichols, 2011). The person-environment fit literature complements the psychosociocultural theoretical perspective on the need for perceived compatibility between the individual and their respective organization. Applying the person-fit framework to a sample of college students, Gilbreath, Kim and Nichols (2011) found that perceptions of student-university fit was significantly predictive of subsequent reports of satisfaction and psychological health. These authors posited that the effects of higher university satisfaction allowed students to reserve their limited resources to focus on academic performance rather than on identifying strategies on how to navigate an unsatisfactory and culturally unresponsive university milieu.

Current scholarship on cultural congruity has found that it is an important variable for academic satisfaction and adjustment among students of color (Edman & Brazil, 2007; Hood, 1992; Johnson & Cuyjet, 2009; Nasim, Roberts, Harell & Young, 2005; Sedlacek, 2010). Gloria, Castellanos, Scull and Villegas (2009) found that cultural congruity represented the strongest predictor of positive psychological outcomes. Additionally, higher levels of cultural self-esteem and reduced perceived educational barriers were positively linked to psychological well-being. Utilizing a sample of Black and Latino students attending a predominately white university, another study found that Black and Latino female undergraduates endorsed significantly higher levels of cultural congruity and perceived social support in contrast with their same-race male counterparts (Constantine, Robinson, Wilton & Caldwell, 2002). Constantine et al. also reported a

significant and positive relationship between public collective self-esteem and social support satisfaction. These students' feelings of cultural match within the university incorporated an assessment of how the collective group is perceived as well as the amount of interpersonal care they experienced on their campus. It appears that the presence and awareness of anti-Black stereotypes on college campuses decreases feelings of cultural fit, which, in turn, can influence academic outcomes (Gloria et al., 1999).

While cultural congruity has theoretically been linked to academic performance, the empirical support for this claim is sparse. In their study of 98 Black students at one southwestern university, Gloria, Robinson Kurpius, Hamilton and Willson (1999) found that cultural congruity significantly predicted persistence attitudes. These authors reported that Black persisters endorsed greater match with the university, perceived the university more positively and expressed lower levels of academic stress. Gloria et al. (1999) demonstrated that as Black students' perceptions of the university environment improved, their sense of cultural congruity increased and they endorsed higher levels of perceived mentorship. Higher levels of perceived mentorship suggests Black students have identified academic role models and are willing to access these individuals as they navigate the educational pipeline. Moreover, cultural congruity impacts students' willingness to seek out assistance with the problems they encounter while on campus (Gloria, Hird & Navarro, 2001). Lower rates of accessing available academic services (e.g., tutoring or career planning services) impedes timely scholastic progress.

For those Black students who perceive that their legitimacy on campus or their intellectual abilities are being questioned, the stigma associated with assessing academic

assistance may contribute to maladaptive coping strategies that ultimately harm the student (Major & Schmader, 1998). When African Americans perceive the cultural climate at predominately White universities as incongruent and culturally exclusionary, stigma researchers suggest that a strong incentive exists to devalue, disidentify and disconnect from this invalidating cultural milieu (Schmader, Major & Gramzow, 2001). Therefore, it appears that cultural congruity represents an important variable in the academic adjustment and persistence of Black collegians.

The psychosociocultural model acknowledges the ability of students of color to develop bicultural attitudes to deal with cultural conflicts and achieve positive academic outcomes (Castellanos & Gloria, 2007). Gloria, Castellanos, Segura-Herrera, and Mayorga (2010) reported that higher Anglo orientation was positively correlated with cultural congruity in their sample of Latino undergraduates. These authors attributed this paradoxical finding to Latina students' utilization of bicultural skills as they traverse the educational pipeline.

Other researchers have acknowledged the necessity of developing bicultural skills (Constantine et al., 2002) or code switching behaviors among Black learners in predominately White settings. In non-inclusive environments, students can utilize various strategies including (a) assimilate to the dominant cultural perspective and culling their native heritage, (b) avoid mainstream activities and maintain separate ethnic enclaves, or (c) be marginalized from mainstream groups as well as their own racial or ethnic group (Berry, 1997). The fourth and optimal strategy may be for students to develop bicultural

skills to deal with cultural challenges rather than disengaging from academic pursuits that position Whiteness as the norm and minimize the contributions of diverse others.

Cultural congruity assesses students' ability to honor their unique cultural heritage while also recognizing the need to work with other cultural groups, particularly White Americans. While it is important for all students to develop bicultural attitudes to thrive in a variety of settings, this model highlights that cultural mismatches are likely to be experienced when Black students feel that only one (White) way of being is appreciated or valid. Cultural congruity within educational settings can be difficult to attain given the historical narratives on Black intellectual inferiority and cultural deficiencies, monocultural pedagogy and Eurocentric miseducation (Cokley, 2006). Cokley identified these variables as cultural factors that potentially impact Black learners' self-beliefs and academic performance, particularly when they are experienced throughout the learner's academic career. Indeed, Steele (1992) notes that a positive correlation exists between the length of time Black students spend in educational settings and their subsequent alienation from them. Steele reminds us of the importance of cultural representation for increasing Black students' feelings of inclusion and fit within the academy.

Prior scholarship suggests that culturally anemic curricula and limited interactions with supportive Black faculty, staff and administrative role models in historically White educational settings are common experiences for Black college students (Quaye, Tambascia & Talesh, 2009). Within this environment, the absence of supportive pedagogy and faculty can harm Black students' attempts to find cultural homeostasis on campus and can disrupt their focus on academics.

In summary, although prior studies suggest that the cultural experiences of African American collegians may differ from the experiences of other college students (e.g., Rankin & Reason, 2005), limited research explicates how these students respond to these distinctive cultural stressors and how it affects their sense of cultural fit within this milieu. When faced with negative stereotypes, stigma and White supremacy ideology in historically White educational settings, some African American collegians may devalue academics, disengage and depart from these oppressive learning conditions. Consequently, reduced academic identification or lowered academic self-concept may be a potential reaction to the feelings of cultural incongruity experienced by these learners.

While self-concept researchers acknowledge the primacy of external factors in the formation and maintenance of academic self-concept (Marsh & O'Mara, 2008), the role of sociocultural factors on academic self-concept and achievement need additional exploration. Within the few available studies on cultural congruity and African American collegians, the focus has primarily been on psychological and adjustment outcomes rather than academic ones. Moreover, those studies that do focus on academic outcomes have relied on persistence attitudes rather than actual academic performance (e.g., GPA). Another limitation of the extant cultural congruity literature is the limited investigations utilizing African American samples; much of the work on cultural congruity has been with Latina/o samples.

In response to these shortcomings, this study will investigate the relationship between cultural congruity and academic self-concept and academic performance of Black collegians as well as assessing whether cultural congruity acts as a predictor of

these academic outcomes. Understanding how cultural match impacts Black students' academic self-concept and scholastic performance may provide us with insight for addressing and reversing the underperformance of African Americans in higher education in comparison to their other-race counterparts. This information will be a valuable addition to the extant literature as strategies to modify the campus environment and improve evaluations of cultural fit on campus may serve to reduce university alienation while simultaneously enhancing academic self-concept and academic achievement in students in this group.

The student-professor alliance can be a critical component in helping to implement these institutional changes. The next section focuses attention to how student-faculty interactions influence the academic outcomes of Black collegians at predominately White educational institutions.

Student-Faculty Relationships

Higher education scholars confirm that student-faculty relationships represent one of the most important interpersonal interactions that transpire on our nation's postsecondary campuses (Love, 2009; Tinto, 1993). All of the influential theoretical frameworks on student retention incorporate student-faculty interactions as a critical component of positive outcomes for collegians, regardless of demographic characteristics (Bean and Metzner, 1985; Pascarella & Terenzini, 1980; Tinto, 1993). Student-professor interactions influence various domains of students' attitudes, behaviors and cognitive development. Given that student-faculty relationships represent one institutional factor that can be manipulated if given proper institutional support and encouragement, faculty

members must capitalize on the tremendous power and influence they possess to facilitate the optimal development of students' full intellectual potential.

For the past three decades, both quantitative and qualitative scholarship has shown that student-faculty interactions exert a powerful influence on academic outcomes among tertiary students (Lundberg, 2012; Pascarella & Terenzini, 1978; Pascarella & Terenzini, 1980; Sax, Bryant & Harper, 2005). These salutary effects are transmitted via both formal and informal student-faculty interactions (Bean & Kuh, 1984). Incorporating data drawn from a nationally representative sample of over 25,000 college students, Astin (1993) found that student-faculty relationships comprised the second most important predictor of undergraduates' college academic outcomes (trailing peer relationships). In particular, his data showed that these connections with faculty members were strongly correlated with students' GPA, graduation rates, and subsequent entrance into post-baccalaureate programs.

More recently, in their study of student-professor connections in highly challenging and anxiety-provoking courses (e.g., organic chemistry), Micari and Pazos (2012) testified that student-faculty relationships positively predicted students' final course grade as well as their overall self-confidence in their abilities to be successful in this challenging class. These authors endorsed that perceiving the professor as a role model, being comfortable approaching her/him, and feeling respected by her/him were also positively related to students' subsequent academic performance.

Student-professor interactions not only influence academic performance, but they also have been connected to positive professional and personal outcomes among

collegians. Lundberg (2010) surveyed 3,332 students of color and found that positive perceptions of faculty and staff predicted increased perceived gains in intellectual skills. Other scholarship has found that positive interactions with professors encouraged students to explore their post-bachelor's educational options and stimulated students to reevaluate their career choices (Allen, 1992; Astin, 1993; Sax, Bryant & Harper, 2005).

Furthermore, personal development among college students has been significantly linked to perceptions of faculty concern and informal faculty relations (Halawah, 2006). Sax, Bryant and Harper (2005) reported that collegians endorsed higher levels of political engagement and enhanced critical thinking skills as they spent more time with members of the faculty. Likewise, in one multi-institutional study exploring the impact of faculty interactions for high-risk undergraduates (e.g., low income, first-generation students), these learners attributed their high rates of collegiate persistence to the close relationships their professors had cultivated with them (Schreiner, Noel, Anderson & Cantwell, 2011). Invested professors who focus on both professional and personal development represent a key component of the student retention puzzle.

While student-professor interactions clearly have a positive influence on the academic, career and personal development of students, research indicates that negative student-professor interactions are important to monitor as well since they exert a deleterious impact on collegians' outcomes. Rosenthal and colleagues (2000) found that students initiated the majority of the interpersonal contacts transpiring between themselves and their professors. Negative experiences with faculty can significantly reduce students' willingness to initiate these interactions, affect students' in-class

performance, and may contribute to reduced satisfaction with other members of the faculty (Rosenthal et al.). While the quality of student-faculty relationships is of prime importance for all tertiary students, prior research suggests that this variable is particularly vital in the academic success of students of color attending historically White educational institutions.

Student-Faculty Relationships and Black Collegians

Utilizing data from a racially diverse sample of 4,500 collegians, Lundberg and Schreiner (2004) presented the following findings concerning student-faculty relationships: (a) for all students, interaction with faculty impacted their collegiate outcomes more than their assorted background variables, (b) faculty interaction variables exerted a stronger effect on the academic outcomes of collegians of color, and (c) quality of student-faculty interactions and feedback from professors constituted the two most important predictors of Black collegians' learning outcomes. Clearly, student-professor interactions are a critical component for all collegians' experiences, but they play a particularly crucial role for Black students (Kim, 2010).

According to data compiled by the NCES (2011), White Americans comprise 85 percent of full-time faculty in higher education institutions (25 percent were White women and 60 percent were White men). Therefore, it is likely that Black collegians will primarily be taught by White American professors. Given the lack of diversity in the ivory tower, power imbalances between the predominately White teaching force and their Black students, and potentially different cultural assumptions, values and histories these individuals bring into the relationship, the student-professor interaction becomes a site

pregnant with potential interpersonal misunderstandings between Black learners and their White instructors.

Student development researchers have provided evidence that these interracial relationships have the potential to be highly problematic for some Black students (Cohen, Steele & Ross, 1999; Cole, 2010; Noel & Smith, 1996). Noel and Smith, for example, reported that Black collegians endorsed lower levels of self-disclosure based on professor's racial background, particularly on topics related to academic, sensitive and racial problems the student was experiencing. When students opted to candidly address these particular issues with faculty members, they indicated a preference for talking with same-race professors. Given the low number of Black faculty members in most historically White institutions, the lack of comfort addressing pertinent issues with White faculty can have long-lasting adverse effects on Black students. This low level of comfort with White professors may explain why Black students reported the highest number of interactions with their faculty in comparison to other students of color and White students, yet they also endorsed the lowest satisfaction with these relationships (Lundberg & Schreiner, 2004; Kim & Sax, 2009). Taken together, these findings indicate that Black students recognize the value of creating bonds with professors as evidenced by the high number of interactions with professors, but they may also struggle to cross-racial lines due to an inability to talk candidly about their unique experiences on campus with the predominately White teaching force.

Another barrier to strong student-faculty relationships with Black students is that faculty members are not immune from internalizing, endorsing and acting on the negative

stereotypes promulgated in our society about the academic capabilities of Black students (Cokley, 2006).

Several studies have found that faculty members were identified as perpetrators of biased and even racist behavior against Black students (D'Augelli & Hershberger, 1993; Swim et al., 2003). Even when professors do not display overtly racist behavior, Black students are attuned to verbal and non-verbal cues that reveal the professors' (lack of) knowledge of students of color as well as their level of (dis)comfort working with diverse students in general and Black students in particular. Consequently, higher education researchers encourage us to evaluate both the quality and quantity of student-faculty interactions with Black students as simply increasing the quantity of interactions may not address the potential hurdles embedded in these relationships or modify Black collegians' perceptions of these relationships (Lundberg & Schreiner, 2004).

When positive student-professor interactions are established with Black students, positive outcomes are witnessed. In his study exploring Black students' intellectual self-concepts, Cole (2011) found that informal contact with professors significantly predicted increased intellectual self-concept and scholastic achievement in this population. These salubrious effects were particularly evident when Black students left the interactions feeling challenged, supported and encouraged by their professors. The implementation of these wise schooling practices by instructors has been shown to positively impact Black learners' academic outcomes (Cohen, Steele & Ross, 1999). The student-professor relationship provides educational institutions with a powerful tool to leverage when

attempting to enhance the experiences of Black students attending historically White educational institutions.

Measuring Student-Faculty Relationships

Responding to the need to identify the specific aspects of the student-faculty interactions that students deemed important, Cokley and his colleagues (2004) created the Student-Professor Interaction Scale (SPIS). This measure is designed to provide a comprehensive assessment of student-faculty interactions. The focus on specific dimensions of student-professor interactions provides a more nuanced technique for assessing the quality of these critical encounters. Furthermore, it avoids the pitfalls associated with only tallying the number of interactions reported by college students as this method ignores how students evaluate these interactions.

Piloted on a heterogeneous sample of 318 collegians, the initial SPIS consisted of 73 items informed by reviewing extant student-faculty instruments as well as other pertinent knowledge on student-faculty interactions. After conducting a principal components analysis (PCA), the following factors were extracted from the data: Respectful Interactions; Career Guidance; Approachable; Caring Attitude; Off-Campus Interactions; Connectedness; Accessibility; Negative Experiences; and Validity Scale. The validity scale ensures participants believe student-faculty interactions are important to their academic outcomes. The researchers reported coefficient alphas greater than .70 for six of the nine SPIS subscales and a full-scale Cronbach's alpha of .93. Strong correlations were found between the SPIS and academic concept and intrinsic motivation. Based on the low internal reliability reported for several of the subscales, Cokley and

associates (2004) cautioned researchers against using the subscales sans additional refinement of the instrument.

In a follow-up study on the SPIS, Cokley and associates (2006) addressed several psychometric limitations previously identified with this instrument. Two of the subscales--Off-Campus Interactions and Connectedness--had poor internal consistency estimates. Several items were added to these scales to address this problem. Cokley et al. reported that the subject-to-variable ratio was too low in their initial study, thus creating psychometric concerns. A heterogeneous sample of 290 students from a Midwestern university served as the validation sample. After conducting principal axis analysis on the revised 40-item SPIS, Cokley et al. (2006) replicated the previous factor structure. Cronbach's alpha for the entire scale was .90, with subscale internal consistency ranging from .73 to .87. On the subscales, professor's approachability and presence of caring attitudes represented two dimensions of student-faculty relationships that predicted positive academic performance for African American collegians but not their White American peers.

More recently, Komarraju, Musulkin and Bhattacharya (2010) explored the influence of student-faculty relationships on college students' academic self-concept, motivation, and achievement using the SPIS. Komarraju, Musulkin and Bhattacharya found three dimensions of student-faculty interactions--feeling respected, being approachable, and off-campus contact--enhanced students' academic self-confidence as well as their intrinsic and extrinsic motivation. While the SPIS provides a psychometrically sound instrument for assessing student-faculty relationships, limited

research has been conducted using it. Despite its limited use, the identification of the specific dimensions of student-faculty interactions related to successful academic outcomes requires additional explication. Furthermore, I was unable to locate any previous scholarship that utilized the SPIS with a predominately Black sample. Given the importance of student-faculty relationships for this student population, it is imperative to explicitly elucidate the dimensions of student-faculty relationships that are associated with successful academic performance. Given that Cokley et al. (2006) found that several dimensions of student-professor interactions were predictive of academic outcomes among Black students, the use of a homogenous sample may reveal other important differences between student-professor interactions and academic outcomes of Black collegians.

Student-Faculty Relationships and Academic Outcomes

Prior research evidence has linked the quality of student-faculty relationships to the academic self-concept and academic achievement of Black tertiary students (Cokley et al., 2004; 2006). In a multi-campus investigation of academic self-concept, Cokley (2000a) reported that, whereas for Black students attending PWIs grade point average (GPA) represented the best predictor of their academic self-concept, the best predictor of the academic self-concept for Black students attending HBCUs was the quality of their relationships with university faculty. In a later study, when compared with their same-race peers attending HBCUs, Black students at historically White colleges endorsed less positive interactions with their professors and less encouragement to attend graduate or professional school (Cokley, 2002b). It is, therefore, not surprising that Cokley reported

the best predictor of academic self-concept for Black students at PWIs was GPA, whereas the strongest predictor of academic self-concept among HBCU-attending Blacks was the quality of student-faculty interactions.

These findings suggest that when Black students and their professors have positive interactions and professors show an interest in Black collegians' professional and personal success and well-being the academic self-concept of Black students can be strengthened. It is clear that educational institutions and their affiliated faculty members--regardless of their racial composition--that are able to assure Black students that they are valued members of the academic community and stimulate their educational potential possess the ability to increase their academic self-concept and academic performance, consequently reaping the benefits of increased rates of retention and graduation. Given the reciprocal relationship between academic self-concept and academic performance (Huang, 2011) as well as faculty members' influence on these factors, faculty must be mindful of the powerful influence they wield in academic settings.

One study on African American collegians experiences reported that more than half of the Black students in their sample reported being the target of race-based insults (D'Augelli & Hershberger, 1993). Shockingly, of those students who endorsed experiencing verbal insults, faculty members represented over one-third of the identified perpetrators. When encountering racially biased incidents, Black students reported less interpersonal comfort and increased feelings of threat, particularly if the incident was perceived as intentionally racist (Swim et al., 2003). Given the pervasive nature of racial microaggressions in the lives of Blacks (Sue, Capodilupo & Holder, 2008), the imbalance

of power between students and faculty, as well as the difficulties and potential consequences involved in responding proactively to perceived racism in White educational spaces (Swim et al., 2003), negative interactions with biased faculty members have the potential to reduce Black students' institutional commitment, affect academic self-beliefs and diminish subsequent academic performance (Cohen & Steele, 2002; Rosenthal et al., 2000). Black STEM students noted that, while PWIs provided access to resources essential to enhancing their career, HBCUs offered a more supportive environment for budding scientists due, in part, to the close mentoring relationships they established with their professors (Hurtado et al., 2011).

Given that Black students reported more interactions with faculty compared to other racial and ethnic groups, while also endorsing the poorest perceptions of these relationships (Lundberg & Schreiner, 2004), it is critical to explore the specific dimensions associated with positive academic outcomes among students. This study will focus specifically on respectful interactions and caring attitudes as these two SPIS subscales provide a useful tool to assess the quality of student-professor interactions and have received support in the previous research.

Cokley et al. (2004) showed that Black and Latino students endorsed less respectful interactions, more negative experiences with faculty, and reduced connectedness with faculty members when compared with their White peers. For the Black and Latino students in Cokley et al.'s sample, respectful interactions with minority students, career guidance, approachability, caring attitude and negative experiences were significantly associated with academic self-concept, while professor's caring attitude was

linked with overall GPA. Using the SPIS, another study found that academic self-concept appears to be enhanced among collegians who feel respected and challenged based on their interactions with their professors (Komarraju, Musulkin & Bhattacharya, 2010).

Similarly, Lundberg (2012) found that students who believed that professors failed to take their in-class contributions seriously witnessed poorer academic outcomes. Indeed, one study found that the strongest predictor of learning outcomes with Black students was exerting additional effort due to professor's feedback (Lundberg & Schreiner, 2004). These findings suggest that learning outcomes can be enhanced by improving the quality not the quantity of student-professor interactions for Black students.

In sum, student-faculty relationships represent an interpersonal factor that has been linked to positive academic self-concept and academic performance (Cokley 2000a; 2002b; Komarraju, Musulkin & Bhattacharya, 2010). Cokley's work reminds us to account for the institutional differences that may affect academic self-beliefs and scholastic performance. It is vital to not only assess academic self-concept given its positive relationship to salutary academic outcomes, but it is important to explore its connection to environmental, sociocultural, interpersonal and psychological influences as they may aid in the prediction of a student's academic outcomes. Not only will the current study assess the relationship between student-faculty relationships and academic outcomes using a homogenous sample, but it also adds to the extant literature by explicitly examining student-faculty relationships alongside sociocultural and environmental variables. Furthermore, it adds to the literature by examining specific

dimensions of student-faculty relationships that may be overlooked by simply assessing the number of interactions Black students have with their professors. The current study assesses the association between respectful interactions and caring attitudes of professors and academic outcomes.

Despite the panoply of research linking environmental, sociocultural and interpersonal variables to students' academic and psychosocial outcomes, limited research is available on the psychological variables associated with Black students' ability to survive oppressive educational conditions. Considering the need to utilize more proximal variables to garner a better understanding of students' lived experiences (Cokley & Awad, 2007) as well as the calls to use an anti-deficit model when studying Black students, assessing Black students' racial identity and resilience can provide useful information for interested stakeholders.

Resilience

Defining Resilience

Despite the presence of numerous environmental, sociocultural and interpersonal hurdles encountered by Black students attending historically White colleges and universities, it is important to highlight that many Black collegians persist and even thrive in these settings. While the extant literature contains a panoply of research evidence documenting the negative experiences and outcomes of Black learners at historically White educational institutions, scholarship on the factors associated with successful matriculation from these learning spaces is somewhat sparse (although it has been growing in recent years).

Currently, the graduation rate for African American collegians is 40% (NCES, 2011). Although this matriculation rate is 19 percentage points below the average college student, it indicates that many Black students successfully traverse to rough terrain to graduation. Accordingly, numerous scholars have encouraged higher education researchers to incorporate anti-deficit models to understand the success and resilience of Black students on postsecondary campuses (Harper, 2010, 2012a). Conceptualized as successful outcomes despite the presence of risk factors (Rutter, 1987), resilience represents a useful construct for understanding the salutary outcomes of Black postsecondary students.

Rutter (2006) defines resilience as "an interactive concept that refers to a relative resistance to environmental risk experiences, or the overcoming of stress or adversity" (p. 1). Luthar, Cicchetti and Becker (2000) contend that resilience is "a dynamic process encompassing positive adaptation within the context of significant adversity" (p. 543). Resilience scholars are particularly "concerned with individual variations in response to risk" (Rutter, 1987, p. 317), particularly in settings where less-than-optimal outcomes are found. Resilience can also be conceptualized as "a general construct that reflects specific characteristics and the mechanisms through which they operate that moderate the relationships between risk factors and outcome variables" (Kaplan, 2005, p. 39).

Resilience scholars highlight that resilience is often erroneously conceptualized as an individual trait rather than a constellation of adaptive behaviors. Rutter (1987) asserts that, "Instead of searching for broadly based protective factors we need to focus on

protective mechanisms and processes" (p. 317). Embedded within individual outcomes are specific protective mechanisms or processes that may help to explain why certain individuals respond favorably in a particular setting while others fail to thrive in the same setting (Rutter, 2006). Knowledge of the specific processes or mechanisms underlying resilience can subsequently be utilized to craft effective interventions.

Moreover, resilience scholars encourage researchers to specify the area of resilience they are studying. Individuals, for example, can be described as resilient in one setting (e.g., school) while remaining at-risk for negative outcomes in other domains (e.g., intimate relationships); that is, resilience is domain and context-specific. Therefore, educational or academic resilience among Black learners will be the primary focus of this inquest.

Qualitative studies on educational resilience with Black students have revealed its connection to positive scholastic outcomes (Floyd, 1996; Graham & Anderson, 2008; Mehan, Hubbard & Villanueva, 1994). O'Connor (1997) highlighted how low-income Black adolescents were acutely aware of the environmental hazards present in their home and school contexts and noted that they were able to articulate how these contextual problems were informed by their race, gender and class background. Despite these contextual vulnerabilities, these students maintained stellar academic marks. Academically resilient students strive to maintain academic excellence due to the recognition that institutionalized racial, gender and class-based disparities represent hurdles designed to thwart their academic interests and progress (Harper & Davis, 2012).

Zimmerman, Ramirez-Valles and Maton (1999) surveyed 172 Black males living in an urban area and found that adolescents who felt empowered to negotiate the social and political challenges of their environment witnessed better outcomes. Those students who were able to find a healthy balance between developing strong academic identities and remaining connected to their home community demonstrated high levels of competence in academic settings (Wright, 2011; Strayhorn, 2009). Academic resilience, thus, represents a set of skills that Black students utilize to navigate unresponsive educational institutions, culturally oppressive pedagogy, poor neighborhoods and negative family and peer influences (Fantuzzo, LeBoeuf, Rouse & Chen, 2012).

One of the limitations of extant corpus of resilience theory and research is the limited study of educational resilience among college students (Werner, 2005). Werner acknowledges that the majority of the available resilience research has focused on compulsory-age children. Consequently, resilience scholars have issued calls to explore the processes of resilience across the developmental continuum. Moreover, within the current resilience scholarship that does include college student samples many of the psychometrically sound resilience measures focus on clinical applications rather than on academic adjustment and resilience (e.g., Connor & Davidson, 2003; Windle, Bennett & Noyes, 2011). Exploration of the mechanisms that facilitate academic resilience among college students will help to fill this gap in the extant resilience scholarship and provide important information for various stakeholders at the postsecondary level.

Measuring Resilience

Given the dearth of reliable instruments to assess the mechanisms of academic resilience in postsecondary students, Carlson (2001) developed and validated the College Resilience Questionnaire (CRQ) to study the process of resilience in this population. After reviewing the literature on resilience and college students, she drafted 50 items to assess this construct. Pilot testing with 115 college students revealed that the CRQ items tapped into two underlying factors. Carlson labeled these factors as Academic Engagement and Social Engagement. The CRQ was subsequently analyzed in three separate studies to assess the psychometric properties of the instrument.

Carlson (2001) tested the convergent and discriminant validity of the CRQ in her first study. A PCA supported the two-factor structure originally found in the pilot study and revealed that the CRQ explained 58% of the variance, with academic engagement and social engagement factors explaining 41% and 17% of the variance, respectively. Internal consistency estimates for the academic engagement subscale was .94 and .77 for the social engagement subscale. Convergent validity was demonstrated through positive correlations found between hope, learning goals, intrinsic goal orientation, and self-efficacy and the CRQ. Significant negative associations were noted between depression and loneliness and the CRQ among students, thus providing evidence of the CRQ's discriminant validity.

Carlson's (2001) second study assessed the links between classroom behavior and students' academic and social engagement scores. Both the academic and social engagement subscales had significant and positive relations with self-efficacy, mastery

goal orientation, achievement goal orientation and use of Internet tutorials. Students who endorsed studying more hours, earlier initiation of studying, lower anxiety levels, higher problem-solving homework completion and higher exam scores procured elevated scores on the academic engagement factor. Students' anxiety was shown to be negatively linked with their CRQ scores. Thus, students' out-of-class academic behaviors are positively linked with their level of resilience as evidenced by their academic engagement.

In her third study, Carlson (2001) evaluated the predictive validity and temporal stability of the CRQ. Based on psychometric data from two previous studies, the CRQ was shortened to 27 items. Correlational analyses revealed that the CRQ has adequate test-retest reliability at .63. High correlations were found between mastery goal orientation, achievement goal orientation and social performance orientation and the CRQ. Predictive validity of the CRQ was demonstrated by showing a significant positive relationship between scores on the CRQ and students' intentions to return to college.

Based on these data, the CRQ appears to be an appropriate instrument for assessing the mechanisms of resilience among collegians. The two-factor structure of academic and social engagement found support in all four studies. Reliability coefficients were strong in all four studies, ranging from .77 - .95 for either factor. Validity evidence was strong with predictive, discriminant and convergent validity being demonstrated. The CRQ also demonstrated adequate test-retest reliability.

Despite this strong evidence of the psychometric properties of the CRQ, one methodological concern with the CRQ is the limited information available on its external validity. Carlson only provided demographic information for one of her samples and this

sample was 96% White American. Sans this demographic information, it is difficult to know if the other samples included any students of color. While subsequent analyses (Reynolds, Sneva & Beehler, 2010; Reynolds & Weigand, 2010) have used this instrument effectively with students of color, there is limited information on its utility among Black collegians. The current study intends to build on Carlson's (2001) work by using this instrument with a Black sample.

Mechanisms of Resilience among Collegians

Carlson's (2001) conception of resilience dovetails nicely with the call to focus on understanding the underlying processes associated with positive outcomes despite exposure to adverse sequelae. Rutter (1987) reminds us:

> Protection does not reside in the psychological chemistry of the moment but in the ways in which people deal with life changes and in what they do about their stressful or disadvantageous circumstances. Particular attention needs to be paid to the mechanisms operating at key turning points in people's lives when a risk trajectory may be redirected onto a more adaptive path. (p. 329)

Per Carlson's (2001) research, academic engagement and social engagement represent the mechanisms through which resilience is expressed in collegians. A plethora of theoretical and empirical scholarship exists affirming the benefits of engagement for postsecondary students. While higher education researchers utilize various terms to describe engagement, the underlying processes and associated behavioral practices are synonymous (Reason, 2009). For instance, Tinto (1993) described this process as

integration, whereas Pace (1980) labeled these engagement behaviors as quality of effort. Likewise, Astin (1999) identified this process as involvement, and Kuh (2009) characterized this process as engagement. Despite the various appellations applied to this concept, student affairs scholars concur on one issue: Student engagement matters. In an era of educational reform characterized by an emphasis on assessment and accountability, student engagement represents a useful proxy for assessing positive college outcomes by administrators, faculty, staff, students and their families (Kuh, 2009).

One of the most widely utilized models of student retention, Tinto's (1993) theory of student departure serves as the conceptual basis for Carlson's (2001) work. Tinto's theory posits students' background variables combine with institutional characteristics to shape students' level of institutional commitment and subsequent integration, which ultimately determines their academic outcomes. Tinto contends that social and academic integration are key ingredients of students' retention, thus those students who are unwilling (or unable) to undergo this assimilation often leave the institution sans academic credentials.

Numerous scholars have challenged the applicability of Tinto's model to students of color and have highlighted the need for cultural advancement of traditional retention models (e.g., Guiffrada, 2003; Tierney, 1999). Tierney (1999) questioned the underlying theoretical assumptions of Tinto's (1993) call for complete social and academic integration to achieve academic success. Tinto's model asserts that students must divorce themselves from their native cultural customs, practices and heritage in order to complete their initiation into the academy successfully. These previous cultural connections are

viewed as detrimental to the student's successful assimilation into college life. Tierney (1999) argues that this assumption unfairly taxes those students who are not original members of the institution (e.g., White, male, able-bodied and middle- or upper-middle class individuals), particularly when institutions are resistant to pluralism. Tierney strongly recommends that an expanded model of student retention must incorporate cultural integrity rather than encouraging cultural suicide among students of color.

Accordingly, historically White colleges and universities must learn to be responsive to the demographic shifts in previously homogenous educational spaces. Moreover, theoretical models derived primarily for all-White populations must be replaced by inclusive ones that recognize the unique cultural experiences of students of color. Institutions place Black students at risk by engaging in practices designed to foster the academic success of a homogenous population rather than addressing the needs of a diverse student population and can negatively influence the engagement processes of these students.

Given Tinto's insinuation that Black students must divorce themselves from their cultural backgrounds, the pressure to acquiesce and internalize the existing cultural norms of the academy may have negative impact on the perceptions of the university environment, evaluation of cultural congruity, the quality of student-professor interactions, academic self-concept and persistence rates of students of color, thus requiring high levels of resilience to overcome these various psychosociocultural challenges. Hu and Kuh (2002) surveyed collegians (N = 50,883) to assess differences between the disengaged, engaged and typical college students. Engaged students were

more likely to have more educated parents, stronger pre-college academic preparation, and more positive perceptions of the university environment. Interestingly, African American collegians were more likely to be classified as engaged than their White counterparts. These higher levels of engagement may provide insight on the mechanisms utilized by Black students to persist in higher education despite the documented psychosocial, environmental and cultural hurdles they face in these spaces (Feagin, 1992; Feagin, Vera & Imani, 1996; Harper & Hurtado, 2007).

Mechanisms of Resilience and Academic Outcomes

Academic Engagement

Although the research literature on academic resilience among Black tertiary students is sparse, a compendium of research literature exists on how academic engagement (a critical mechanism of resilience) contributes to educational resilience among Black students at the secondary level (Akom, 2003; Carter, 2007, 2008; Hemmings, 1996; Lee, Winfield & Wilson, 1991; O'Connor, 1997; Strayhorn, 2009; Wright, 2011). In his study of Black females in the Nation of Islam, Akom found that these students recognized the value of obtaining strong academic marks and thus were highly engaged in their classes and during their study times. These students, however, also used their critical thinking skills to challenge the hegemonic education they were receiving. Problematizing the education they were receiving provided a way for these students to remain engaged sans losing their cultural identities. Another study with high-achieving Black male high school students noted these adolescent scholars recognized the structural barriers to their success while also acknowledging the need to remain

academically engaged if they wanted to secure a better life for themselves. Academic resilience evidenced via academic engagement appears to be a critical component in the success of Black students who are facing environmental and sociocultural challenges (Harper, 2008).

Previous scholarship has established a strong link between academic engagement and academic performance. Kuh and colleagues (2008) collected data from collegians (N = 6,193) regarding their engagement practices. Combined with measures of prior academic preparation, student engagement in educationally purposeful activities explained 42% of the variance in first-year students' GPA, with student engagement explaining a significant and positive proportion of this variance. Apropos to this study, Kuh et al. found that Black students benefited more from engaging in these activities when compared to their White peers. Engagement exerted a compensatory influence on students with lower pre-college academic achievement; in fact, at average levels of engagement, African American collegians were more likely to persist than their other-race peers (Kuh et al.).

Monitoring students' engagement level across an entire semester, Svanum and Bigatti (2009) found that higher academic engagement was linked to significantly faster degree completion, higher degree GPA and higher cumulative GPA. The highly engaged collegian surpassed their expected performance based on their mid-career GPA, admission examination scores or both scores on both indices combined. These results demonstrated that academic engagement in this one course had positive relations with subsequent academic performance and persistence even after the course was completed.

Institutions where students endorsed higher levels of academic challenge, an active and collaborative learning environment, greater faculty emphasis on students' acquisition of more complex learning strategies, and a supportive campus environment witnessed higher-than-expected rates of persistence attributable to the various forms of academic engagement provided by their institution (Nelson Laird, Chen & Kuh, 2008).

In the largest empirical study of academically successful Black males (N = 219), Harper (2012a) demonstrated that participation in and leadership of several student organizations, multi-year interaction with key institutional leaders, and access to enriching educational experiences (e.g., study abroad programs, summer internships, etc.) represented a critical component in these young men's success. Harper and Quaye (2007) found that Black males who held student leadership positions often endorsed higher academic integration and subsequent academic success.

Using the CRQ, Reynolds and Weigand (2010) revealed that amotivated students endorsed lower self-efficacy, reduced resilience (lower academic and social engagement scores), and more negative views of the campus. Furthermore, regression analysis showed that academic and social engagement represented the sole predictor significantly correlated with first-year students' GPA in this study. Hence, as students engaged more in the academic and social aspects of the campus, their persistence level also increased (Reynolds & Weigand).

While it is clear that academic engagement is critical for educational resilience (e.g., Harper, Carini, Bridges & Hayek, 2004), several limitations characterize the existing research in this area. Many of these studies were conducted with predominately

White samples. Other studies that garnered diverse samples frequently combined all students of color into one group and compared them with the White students in the sample. The failure to procure a large, representative student sample contributed to these researchers' inability to disaggregate their findings. The current study will attempt to address these limitations. Furthermore, given that prior studies indicate academic and social engagement have significant, positive relations with intrinsic motivation among Black and Latino undergraduates at predominately White universities (Reynolds, Sneva & Beehler, 2010), it will be critical to examine both of these forms of engagement using an African American sample. Both academic engagement and social engagement are associated with positive academic outcomes among students of color generally (Strage, 1999) and Black students particularly (Carini, Kuh & Klein, 2006; Harper, 2012a; Harper & Quaye, 2009).

Social Engagement

Alongside engagement in academic pursuits, high levels of social engagement (another mechanism of academic resilience) facilitates positive outcomes for college students. One study found that social engagement predicted academic persistence and achievement, with persisters utilizing more positive coping strategies than their non-persisting peers (Pritchard & Wilson, 2003). Other research has noted that positive social relationships with peers and faculty contributed to enhanced professional identity development and lubricated the academic process for Black students (Proctor & Truscott, 2012).

Researchers contend that formal social contexts on college campuses must be evaluated as they represent critical sites for Black students' social integration and subsequent engagement into the academic culture. Quaye, Tambascia and Talesh (2009) highlight how various practices that occur within classroom settings detrimentally impact Black students' social engagement. Monocultural curricula, limited discussions of pertinent social issues, lack of critical mass of Black students, and the absence of same-race faculty are a few challenges to Black students' integration into the social fabric of the historically White university. Lack of attention to these social factors in formal settings can create an inhospitable learning environment that may exacerbate Black students' feelings of social alienation and isolation (Solorzano, Ceja & Yosso, 2000). Undoubtedly, these negative perceptions of the campus racial milieu influence these students' level of social engagement in both formal and informal settings.

Informal social contexts on college campuses must be assessed as well to eliminate barriers to the full inclusion of Black learners. Johnson et al. (2007) found that residence halls represent fertile sites to foster social integration and engagement among all students, which ultimately contributes to higher sense of belonging among African American collegians and aids in their transition to the campus. Moreover, students who live on campus and work less hours off-campus are more likely to endorse higher levels of social integration and engagement (Fisher, 2007). Taken together, these findings remind us to be mindful of both the formal and informal collegiate milieu when assessing students' social integration.

In sum, extant literature has failed to explore resilience among college students in general and African American collegians in particular. Following Rutter's (1987) advice to focus on the mechanisms through which resilience is expressed, this study uses the CRQ to examine the mechanisms of resilience as evidenced by academic and social engagement. Resilience through academic and social engagement recognizes the heterogeneity present among African American collegians. Academic resilience through social engagement is likely to occur in diverse ways depending on a variety of factors, including racial or ethnic identity and level of out-group comfort. However, the only requirement is that students actually be actively engaged in their academic programs (e.g., academic engagement) and connected to at least one of the various subcultures at the university (e.g., social engagement).

This perspective acknowledges Tinto's (1993) assertion that students must be engaged and become integrated into the existing academic community, but offers students alternative mechanisms to demonstrate engagement sans cultural suicide (Tierney, 1999). Race-specific engagement is consistent with the recent findings that resistance to environmental and sociocultural hazards is increased through controlled exposure and engagement rather than complete avoidance of the threatening stimuli (Rutter, 2006). Thus, Black collegians who utilize Black student organizations as a safe base from which to gradually interact with their White peers actually show more positive outcomes than those who become overwhelmed by the environmental and social stressors present at HWCU and depart the institution (Guiffrida, 2003). This study contributes to the extant literature by exploring the mechanisms of academic resilience among African

American collegians and their connection with academic outcomes. It also explores racial identity as another potentially protective factor for Black students.

Racial Identity

Measuring Racial Identity

Racial identity represents one of the most empirically examined psychological variables among African Americans (Cokley & Vandiver, 2011). This focus on racial identity among Blacks can be linked to the unique sociocultural and sociohistorical realities encountered by African Americans. Helms (1990) defined racial identity as “a sense of group or collective identity based on one's perception that he or she shares a common racial heritage with a particular racial group” (pg. 3). Other race scholars have labeled racial identity as "the significance and qualitative meaning that individuals attribute to their membership within the Black racial group within their self-concepts" (Sellers et al., 1998, pg. 23).

Currently, two popular models of racial identity exist in the literature. Cross' (1991) nigrescence racial identity model of Black racial identity constitutes the older of the two models. This groundbreaking model spawned the development of many racial identity instruments, including Helms and Parham's (1981) popular racial identity measure, Racial Identity Attitude Scale—Black (RIAS–B) and the Cross Racial Identity Scale (CRIS; Vandiver, Fhagen-Smith, Cokley, Cross & Worrell, 2001). Initially, the Cross model relied on a developmental stage model of racial identity but it has shifted its focus to stages in subsequent revisions (Vandiver, Cross, Worrell & Fhagen-Smith, 2002). Although this model has undergone revisions in response to scholarly criticisms,

its reliance on stages has been criticized (Sellers et al., 1998). One issue is that stage models of racial identity implies a hierarchical ranking of racial identity statuses and that certain racial identity statuses represent more optimal psychological well-being and functioning.

Attempting to respond to this limitation, Sellers and colleagues (1998) introduced the Multidimensional Model of Racial Identity (MMRI); this model represents the other popular racial identity model. The MMRI assumes that individuals possess multiple identities and that these various identities are hierarchically ordered. Appreciating the intersectionality of personal identities, race is not assumed to be an individual's most important identity. The MMRI eschews preordained developmental stages and allows the individuals' perceptions of their racial identity to be the critical barometer of their identity.

The MMRI posits that racial identity is comprised of four dimensions (Sellers et al., 1998). Racial salience is a context-dependent component of racial identity. It denotes how salient race is in certain situations and proposes that certain environments will kindle more attention to race than other milieus. In contrast, racial centrality is a stable dimension of racial identity and is defined as the importance an individual attaches to their racial group membership. It provides information on how the individual approaches race in their daily lives and whether race is considered a normative aspect of their experiences. The third dimension racial regard details how one affectively feels about their racial group and contains two subparts. Private racial regard is how one feels about

being Black as well as how one personally feels about other African Americans, whereas public racial regard represents how one believes Blacks are perceived and valued by members of the broader society.

Racial ideology represents the individual's philosophy on how African Americans should operate in the world (Sellers et al., 1997). The MMRI proposes that there are four racial ideologies. Those individuals with a *nationalist* ideology focus on the unique life experiences of Blacks and believes this experience is different from other groups. As such, they believe that Black people should control their own communities and limit input from outside groups. Individuals with an *oppressed minority* ideology recognize common struggles between other marginalized groups and African Americans. They are willing to work with these other oppressed communities to galvanize social change. Those with an *assimilationist* ideology, on the other hand, believe that Blacks should strive to be seen as American first and view Blackness as a more periphery aspect of their identity. African Americans with a *humanist* ideology contend that Blacks should be seen as humans first and transcend racial categorization. These individuals attempt to focus on issues that eclipse racial classification, such as poverty or world peace.

Given the diverse ways the MMRI conceptualizes racial identity, Sellers and colleagues (1998) noted that researchers could utilize any of the four dimensions based on the research goals of the study. The current study focuses on the role of racial centrality. While the other components of racial identity are important, racial centrality provides an efficient way to evaluate racial identity in relation to other outcomes. Across various educational settings, racial centrality is an important variable for Black collegians

(Cokley, 1999). Racial centrality informs us of how race operates in the daily lives of African Americans and assesses how it influences their perspectives, beliefs, worldview and behavior. Although there is a well-developed literature on racial identity and a host of outcomes, including physiological health, mental health, interpersonal interactions, intrapersonal processes and academic outcomes (Pieterse, Todd, Neville & Carter, 2012), there is limited information on how racial identity, particularly dimensions of racial identity, affect academic outcomes.

Racial Identity and Academic Outcomes

Fordham and Ogbu's (1986) "burden of 'acting White'", arguably, represents one of the most popular works on the linkage between racial identification and academic outcomes among African Americans. While their controversial qualitative work is frequently interpreted without acknowledging its original context (Fordham, 2008), it is popular in mainstream venues for explaining the negative impact of racial centrality on academic performance. As popularly interpreted, the "acting White" thesis posits that due to the centuries of restricted access to valuable life-enhancing educational and economic opportunities in the U.S., American Blacks have developed a subculture that does not value intellectual pursuits as these activities are linked to Whiteness. According to the popular interpretation, this intragroup sanctioning of academic excellence represents the primary culprit in the current “achievement gap” witnessed between Black and White American students.

In an effort to clarify her original work, Fordham (2008) noted that most popular interpretations of her work ignore that the Black students in her study were astute social

observers. In a nation built on White-supremacist notions, these students recognized that social advancement was easier when one was adept in mirroring Whiteness. She contended that: “In exchange for what is conventionally identified as success, racially defined Black bodies are compelled to perform a White identity by mimicking the cultural, linguistic, and economic practices historically affiliated with the hegemonic rule of Euro-Americans” (pg. 227). For example, one could argue that being well versed in classical music typically garners one more social status than being a rap or hip-hop aficionado just as being more knowledgeable on European history is deemed as preferable to knowing African history.

Thus, Black learners who devalued their Black identity or those who decided to take on a "raceless" façade recognize that Whiteness is more valued than strong racial identification with a racial minority group. In a White supremacist setting, possessing high Black racial centrality yields less educational and social benefits than if one is able to appreciate White history, knowledge and norms as Black history, customs and ways of being have historically been devalued and deemed as worth less and frequently worthless. For individuals who take this position, lower racial centrality would likely mean they have internalized the lessons of White supremacy well and now were connecting all that is good, such as academic excellence, solely with Whiteness. These misperceptions likely influence Black students’ academic self-beliefs as well.

Other more recent studies question the value of strong racial centrality in academic settings (McWhorter, 2000). McWhorter suggested that Black students who value their Blackness wallow in subcultures of anti-intellectualism, separatism and

victimology. McWhorter lays out his theory using detailed personal anecdotes from his professional teaching experiences at one prestigious southwestern university, but he fails to provide any empirical research to support the existence of these subcultures among Black learners. According to McWhorter's thesis, deemphasizing one's racial identity would be the optimal strategy for Black students if they hope to achieve academic success. Combined with Fordham and Ogbu's writing, these studies suggest that high racial centrality may actually be detrimental to academic self-concept and academic achievement.

Other scholars contend that racial identity has a limited or minimal impact on academic performance for Black learners. Using hierarchical regression, Lockett and Harrell (2003) found that racial identity explained only a limited amount of the variance in academic outcomes, particularly when it was examined with self-esteem. One limitation of this study is that it used the RIAS-B, which has been criticized for its questionable psychometric properties (Cokley, 2007). In a study of Black college students, Awad (2007) found that racial identity (as measured by the CRIS) was not a significant predictor of overall GPA or standardized test performance. Although some scholars posited that racial identity and academic outcomes would be positively linked, this study suggested that these two variables might not be directed linked to racial identity statuses. Theoretically, the CRIS does not claim to be able to predict academic outcomes. Thus, it seems appropriate that the link between racial identity and academic outcomes would not be strongly linked using this instrument.

Cokley, McClain, Jones and Johnson (2011) found that racial centrality was a significant negative predictor of GPA in their study of Black high school students. Given that the students in this sample were from a high-poverty high school, they may have been exposed to a limited number of successful Black role models as well as stereotyped ideas of Blackness that deemphasizes academics as a potential avenue to improve one's situation. Accordingly, they may have internalized negative beliefs about what being Black means and separated academic proficiency from their conception of Blackness.

There is evidence that the effect of racial identity may operate differently for different students based on other factors. Another study of Black high school students revealed that when high racial centrality is combined with a belief in negative racial stereotypes, Black learners had lower evaluations of their academic competence (Okeke, Howard, Kurtz-Costes & Rowley, 2009). Thus, racial centrality may be a negative predictor of academic success when it is linked to negative beliefs about Blacks.

Gender represents another variable where racial group membership and academic identity are intertwined and can be a differential impact on academic outcomes. Cokley and Moore (2007) found that for Black men racial centrality was negatively correlated wih GPA while racial centrality had no relationship with Black women. Additionally, gender moderated the relationship between racial centrality and GPA with it having a significant negative relationship for Black men and a significant positive relationship for Black women. Cokley (2001a) found a positive correlation between racial centrality and academic self-concept for Black female collegians and no significant correlation between these two variables for their Black male peers although there were no significant gender

differences on racial centrality. Cokley reported that racial centrality appeared to play a stronger role for Black women's academic outcomes in comparison to their Black male counterparts.

Another set of research findings suggests that racial identity can be positively linked with academic outcomes. Cokley's (2003) empirical work forcefully refuted the underlying assumptions of McWhorter's thesis and found that identity variables can play a positive role in academic performance. Akom (2003) found that racial solidarity, in addition to a critical social justice lens and strong study habits, facilitated the academic success of Black female students. Another qualitative study of high-achieving Black women found that racial identity was a central component of these students' activities in the classroom and selection of extracurricular activities (Marsh, 2012).

Contrary to the proposition that racelessness is valuable in academic settings (Smalls, White, Chavous & Sellers, 2007), race centrality may facilitate academic engagement and salubrious scholastic performance. Although racial centrality is recognized as an important variable, there is a paucity of research on its connection to educational outcomes. In one early multi-site study of racial identity and scholastic outcomes among Black collegians, Sellers et al. (1998) found that high racial centrality was predictive of higher cumulative GPA. They noted that racial identity only explained 14% of the variance in academic performance. While racial identity is an important consideration, they cautioned that other variables might be more predictive of academic success. In general, this scholar have suggested that racial identity should be connected to GPA weakly or indirectly. Although prior studies have not focused specifically on

dimensions of racial identity, it is not expected that racial centrality will be a strong predictor of academic performance.

Considering the highly racialized context of American higher education, the inclusion of identity-based variables, such as racial centrality, is critical when examining academic self-concept. Alongside the typical identity challenges associated with emerging adulthood, Black young adults attending predominately White educational institutions must also deal with challenges related to race, racial identity and academic identity. Depending on one's level of racial centrality, a student's academic self-concept can be dramatically different. For some students, having strong racial identity may push them to excel academically to validate their individual perceptions of what it means to be Black, whereas for others racial centrality may diminish academic performance if one believes in the negative stereotypes about Blacks' academic performance. For these students, academic self-beliefs will vacillate between two extremes with a positive relationship between academic self-concept and racial centrality for some Black learners and a negative relationship for other relationships.

Given the limited information on the relationships between racial centrality, academic self-concept and GPA, this study adds to the current literature by exploring the linkages between these variables. Cokley's (1999) scholarship indicates that racial centrality is a core component of many Black students' experiences and that it differentially affects their academic self-concept based on gender (e.g., Cokley & Moore, 2007). Considering recent sociopolitical changes (e.g., the election of the first African American president) as well as the developmental differences in the age of the samples

that showed racial centrality was negatively associated with outcomes, it seems reasonable to explore how academic self-concept and racial centrality are linked as well as the relationship between GPA and racial centrality in the age of Obama.

Proposed Research Study

Sedlacek (2003) listed positive self-concept, the ability to deal with racism, and the presence and availability of strong support person as three of eight noncognitive variables that predict positive educational outcomes for Black collegians. Not only do these variables represent critical supplements to traditional measures of academic merit, but they also may help us to identify the sociocultural, environmental, interpersonal and psychological variables that must be incorporated to improve Black students' academic self-concept and academic achievement.

Although research suggests that academic self-concept and academic achievement reciprocally influence each other, there has been more scholarly focus on predictors of academic achievement than on predictors of academic self-concept. Marsh (1990a, p. 83) acknowledges that academic self-concept is "formed through experience with, and interpretations of, one's environment" and is heavily "influenced by evaluations by significant others, reinforcements, and attributions for one's own behavior." Given that academic self-concept is influenced by both internal and external influences, it is critical to examine these various educational tributaries. Indeed, a better understanding of the predictors of academic self-concept not only provides valuable information for enhancing academic self-beliefs among Black collegians but it also can lead to enhanced academic performance as these two variables operate reciprocally.

This study explores how psychosociocultural factors, student-faculty relationships, resilience and racial centrality influence academic self-concept and achievement among African American collegians. In particular, it focuses on perceptions of the university environment, cultural congruity, student-faculty interactions, racial centrality and resilience as predictors of Black students' academic self-concept and achievement. It adds to the extant literature by increasing our knowledge of how environmental, sociocultural, interpersonal and psychological factors influence academic self-concept and performance in historically White educational settings. Controlling for significant demographic variables, one hierarchical multiple regression will be used to explore whether psychosociocultural influences, student-faculty relationships, racial centrality and resilience explain any additional variance in GPA above and beyond that predicted by academic self-concept. A second hierarchical multiple regression will examine whether psychosociocultural influences, student-faculty relationships and racial centrality explain any additional variance in academic self-concept above and beyond that predicted by resilience (via academic and social engagement).

Research Questions, Hypotheses and Analyses

Research Question 1: What is the relationship between academic achievement and the independent variables (academic self-concept, university environment, cultural congruity, student-professor interactions, and resilience) under investigation?

Hypothesis 1a: It is predicted that academic self-concept and GPA will be positively correlated.

Rationale 1a: The strong and positive relationship between academic self-concept and GPA represents a robust finding in studies of African American collegians (Awad, 2007; Cokley, 2002a; 2003; Cokley & Moore, 2007). The reciprocal effects model suggests that elevated academic performance contributes to higher academic self-concept and higher academic self-concept enhances future academic performance (Guay, Marsh & Boivin, 2003; Marsh & Yeung, 1998). The bulk of the literature supports the contention that Black learners with higher academic self-concept perform at higher levels than their peers with lower academic self-beliefs (e.g., Osborne & Jones, 2011). Given the bidirectional relationship that exists between academic self-concept and academic performance (Marsh & O'Mara, 2008), it is predicted that higher academic self-concept scores will be strongly correlated with higher GPA.

Hypothesis 1b: Perceptions of the university environment will be positively correlated with students' GPA.

Rationale 1b: According to the psychosociocultural model, environmental factors play an important role in the academic success and persistence of African American collegians and should be analyzed as a critical component in all discussions of educational success among Black students in higher education (Gloria & Castellanos, 2003). Likewise, Tinto's (2006) theoretical model of student departure supports the need to evaluate environmental factors in students' academic retention and persistence. One recent study found that as Black students perceived the campus more positively, normative academic behaviors, such as studying and class attendance, increased (Museus,

Nichols & Lambert, 2008). These everyday activities are the building blocks for future academic success and persistence.

Admittedly, students can perceive the environment negatively and still succeed (Akom, 2003; Carter, 2008); however, existing literature indicates that unwelcoming scholastic contexts negatively influence students' motivation and persistence levels (Reynolds, Sneva & Beehler, 2010) and academic performance (Tuitt & Carter, 2008). Negative collegiate environments are taxing psychologically, physiologically and academically for Black learners (Cokley, 2006; Gloria & Pope-Davis, 1997). Consequently, reduced academic performance, academic disidentification and early departure have been identified as potential consequences of perceiving a negative collegiate milieu (Osborne, 1999). In contrast, those students who perceive their campuses in a positive manner are expected to garner higher academic marks in comparison to those individuals who endorse more negative perceptions. It is predicted that more positive evaluations of the university environment will be positively associated with higher GPA.

Hypothesis 1c: It is hypothesized that cultural congruity will be positively correlated with students' GPA.

Rationale 1c: Per the psychosociocultural framework, cultural congruity represents one way to assess cultural match or fit among students of color at historically white universities (Gloria & Robinson Kurpius, 1996). This model posits that as cultural congruity increases optimal academic outcomes become more likely given that students will be able to focus their energy on their academic tasks rather than dealing with

perceived cultural impasses (Castellanos & Gloria, 2007). Student development theorists and researchers affirm that students' sense of belonging and fit within the college environment influences their academic and social outcomes (Johnson et al., 2007). Likewise, in their studies of person-environment fit, industrial-organizational psychologists report similar findings of peak performance when individuals endorse high levels of concordance with their current environment (Gilbreath, Kim & Nichols, 2009).

As students of color perceive greater similarity between their cultural values (e.g., respect for diverse students and their communities, inclusion of diverse perspectives in curricula, pedagogy and faculty, collectivistic class structure, etc.) and those endorsed by the university, they may be more inclined to strive for academic competence and experience stronger commitment to the institution (Gloria & Rodriguez, 2000). In their study of Black undergraduates, Gloria, Robinson Kurpius, Hamilton and Willson (1999) found that cultural congruity, social support, and perceptions of the university environment significantly predicted academic persistence. Correspondingly, researchers contend that Black students at historically Black colleges and universities (HBCUs) experience enhanced outcomes despite more limited resources at HBCUs due primarily to the culturally supportive learning space offered at these institutions (Allen, 1992; Fleming, 1985; Palmer, Davis & Thompson, 2010). Although it is feasible that students with low cultural congruity scores can perform well academically (e.g., Akom, 2003), it is predicted that higher levels of cultural congruity will be positively associated with the academic success of Black collegians.

Hypothesis 1d: It is hypothesized that student-faculty interactions will have a positive relationship with academic performance.

Rationale 1d: College student development scholars have documented the importance of student-faculty relationships for students' academic, professional and personal success (Chickering & Gamson, 1987; Tinto, 1993). Indeed, Chickering and Gamson listed positive student-professor interactions as one of the key ingredients for academic success among all undergraduates. Cole's (2007) analysis demonstrated that students' intellectual self-concepts are enhanced through their professional connections with faculty. Other studies have found a positive relationship between learning outcomes and student professor interactions (Lundberg, 2010).

Higher education scholars have noted that Black students tally the highest number of interactions with faculty while also endorsing the lowest satisfaction with these encounters (Lundberg & Schreiner, 2004). These findings suggest a need to focus on the quality of the student-professor relationship rather than the actual number of interactions. Focusing on the specific dimensions of student-professor interactions, Cokley and associates (2006) reported positive associations between perceptions of approachability and caring attitudes of professors and Black students' GPA. Another survey of student-professor interactions found that three aspects of student-professor interactions (feeling respected, being approachable and off-campus contact) significantly predicted academic performance and intrinsic and extrinsic motivation among Black collegians (Komarraju, Musulkin and Bhattacharya, 2010). Komarraju et al. also indicated that respectful interactions with faculty was negatively correlated with amotivation, suggesting that

positive encounters with professors may actually sustain Black students' academic drive and bolster their commitment to academic success. Conversely, negative interactions between Black students and their professors can contribute to poor outcomes, including academic disengagement and nonpersistence decisions (Cokley, 2000a). Taken together, this scholarship suggests that there should be a positive relationship between dimensions of student-faculty relationships (e.g., respectful interactions and caring attitude) and academic achievement.

Hypothesis 1e: It is predicted that resilience (academic and social engagement) will be positively correlated with academic performance.

Rationale 1e: Multicultural scholars encourage us to explore the variables that faciliate Black students' academic success despite the existence of culturally invalidating and hostile collegiate millieu (Tuitt & Carter, 2008). Resilience scholars insist that researchers identify the mechanisms that underlie students' ability to thrive despite the presence of risk factors (Rutter, 2006). Guided by Tinto's (1993) model of college student involvement, Carlson (2001) showed that resilience represents an important variable in college students' success. In her model, academic and social engagement represent the primary vehicles for students to showcase their resilience; that is, as students' academic and social engagement levels increase, they are more likely to withstand adversity in academic settings and persist to graduation. Resilience as evidenced by academic engagement has been positively linked with student's self-efficacy, on-task behaviors (e.g., hours studying, use of online course-related materials) and subsequent academic performance (Carlson). These findings on higher resilience

among more engaged students are consistent with Chickering and Gamson's (1987) good practices for producing academic excellence among collegians.

Academic resilience has been shown to be one of the noncognitive factors associated with the ability of Black students to weather unsupportive contexts associated with historically White campuses (Finn & Rock, 1997; Sedlacek, 2010). Academic engagement-one of the mechanisms of academic resilience-has been shown to positively predict critical thinking skills (Carini, Kuh & Klein, 2006) and educational performance (Reason, 2009). Indeed, it represents one of the strongest predictors of academic success for college students (Hu & Kuh, 2002). Moreover, social support from family (Barnett, 2004), extended family (Brown, 2008), community members (Brown, 2008) and peers (Harper, 2006b; Johnson, 2003) have been linked to Black collegians' academic persistence. Thus, social engagement and academic performance should have positive linkages. A positive correlation is expected between resilience (academic and social engagement subscale) scores and GPA.

Hypothesis 1f: It is predicted that racial centrality and academic performance will be positively correlated.

Rationale 1f: Despite the attention given to the relationship between racial identity and academic performance (e.g., Fordham & Obgu, 1986), there have been limited explorations of academic outcomes and racial centrality specifically. Sellers and colleagues' (1998) work on dimensions of racial identity provides a nuanced way to explore the effects of racial identity on educational outcomes. For Black students at both predominately White and Black educational institutions, race appears to be an important

aspect of their identity (Cokley, 1999). However, the current evidence is mixed on how racial centrality affects academic outcomes. In a study of Black collegians attending a HBCU, Sellers et al. found that racial centrality was positively linked to cumulative GPA. Other studies have shown a positive association between high racial centrality and salubrious academic engagement behaviors (Akom, 2003). Cokley and Moore (2007) found that racial centrality was negatively related to academic achievement for Black male collegians and had no relationship for their Black female counterparts.

While available evidence on the relationship between cumulative GPA and racial centrality is mixed, it is expected that racial centrality will have a small but positive correlation with GPA. Given the presence of more proximal variables, Sellers et al. (1998) suggested that the association between racial identity variables and GPA should be relatively weak.

Analysis 1a-f: These research questions will be answered by calculating a Pearson's correlation coefficient between students' overall scores on the ASCS, UES, CCU, SPIS (Respectful Interactions and Caring Attitudes subscales), CRQ, the RCS and students' cumulative GPA.

Research Question 2: What is the relationship between the independent variables (university environment, cultural congruity, student-faculty interactions and resilience) and academic self-concept?

Hypothesis 2a: This study postulates that perceptions of the university environment will be positively correlated with academic self-concept.

Rationale 2a: Self-concept researchers have noted that while academic self-concept derives, in part, from external feedback, much of the current literature on this construct has focused limited attention on assessing the role of environmental factors on academic self-concept (Marsh & O'Mara, 2008). Academic self-concept constitutes a critical (but often overlooked) aspect of the student retention and success puzzle (Osborne & Jones, 2011). Considering the strong association between academic self-concept and academic performance, educational stakeholders should not only monitor GPA but should also be mindful of the influence of their academic beliefs on achievement, particularly within the context of historically White educational setting.

Campus climate researchers detail the negative experiences of many Black students on historically White campuses due to racist stereotypes regarding their intellectual abilities (Steele, 1992; Sue et al., 2008), lowered teacher expectations (Cokley, 2006) and antagonistic interactions with White American peers and instructors (Smith, Yosso, Solorzano, 2007; Swim et al., 2003). These conditions draw on centuries of denigrating messages concerning the educability of African American learners. The cumulative effect of dealing with these explicit and implicit forms of academic racism and intellectual microaggressions may impact Black students' academic self-beliefs (Brown & Lee, 2005). However, limited empirical evidence is available that explicitly investigates the relationship between perceptions of the university environment and academic self-concept. Nevertheless, it is predicted that as evaluations of the campus increase academic self-concept will also be higher.

Hypothesis 2b: It is hypothesized that cultural congruity will be positively correlated with academic self-concept.

Rationale 2b: This hypothesis draws on the psychosociocultural model to understand how cultural congruity can influence academic self-concept (Gloria & Castellanos, 2003). According to this model, cultural mismatches are more likely to occur for Black students on historically White campuses due to the historical legacy of racial exclusion at these institutions, their original mission of educating middle-class White males and the lack of a critical mass of Black students and professors (Gloria & Pope-Davis, 1997). Given the importance of external inputs for academic self-concept (Marsh, 1990a) and the developmental and identity challenges associated with matriculation into these settings, Black students' sense of cultural match may affect their overall evaluation of their academic abilities.

Hurtado's (1994) study of Black and Chicano graduate students found that the academic self-concept of these students was influenced by their evaluation of the cultural ambience of their graduate programs. Prior studies have shown an association exists between cultural congruity and psychological well-being (Gloria, Castellanos & Orozco, 2005), social support satisfaction and public collective self-esteem (Constantine et al., 2002), and more positive evaluations of the campus environment (Gloria et al., 1999). Constantine et al.'s findings showed that Black collegians who believed others viewed African Americans positively endorsed higher cultural congruity scores. Unburdened by the fear of negative evaluations, students are able to focus more of their attention on academic matters when they feel they are valued and respected on their respective

campuses despite racial and cultural differences (Lundberg, 2010). Lundberg found that institutions that value student diversity witnessed stronger student learning outcomes among students of color. This increased academic performance likely would have a reciprocal effect on Black students' academic self-beliefs (Marsh & O'Mara, 2008). Although cultural congruity is recognized as a theoretically important construct in Black learners' academic outcomes, a dearth of scholarship exists that directly assesses the relationship between academic self-concept and cultural congruity. It is predicted that Black students' with higher cultural congruity scores will also possess higher academic self-concept scores.

Hypothesis 2c: It is expected that student-faculty interactions will be positively correlated with academic self-concept.

Rationale 2c: Student outcomes researchers have testified to the importance of student-faculty relationships for salubrious student outcomes (Bean & Kuh, 1984; Cokley et al., 2006; Pascarella & Terenzini, 1978; Young & Sax, 2009). Considering the varied forms of racism Black students encounter at historically White campuses and continued microaggressions against this student population (Sue et al., 2008), strong student-faculty relationships can serve to bond Black students to their respective campuses and help them to manage these racial challenges (Cress, 2008). Rather than focusing on the quantity of interactions students endorse with their professors, it is important to identify the qualities or specific dimensions of these relationships that work for Black students (Lundberg, 2008). Student-professor relationships can be particularly useful when these interactions are charaterized by mutual respect, trust, and a focus on individualized care and concern

for the professional and personal well-being of the student (Schreiner, Noel, Anderson & Cantwell, 2011). Salutary interactions with professors assist Black students in attaining academic success and building their intellectual self-confidence through optimal levels of support and challenge (Cole, 2007), thereby generating a positive scholastic feedback loop. Cokley (2000a) reported that students who endorsed being encouraged by their professors had higher academic self-concept and academic motivation than students with more negative perceptions of these interactions. Hence, it is expected that two dimensions of student-professor interactions (respectful interactions and caring attitudes) will be positively associated with academic self-concept.

Hypothesis 2d: It is expected that resilience (academic and social engagement) will be positively related to student's academic self-concept.

Rationale 2d: Carlson (2001) proposed that the mechanisms of academic resilience among college students were academic and social engagement. Students endorsing higher academic and social engagement are more likely to garner support and encouragement from professors, experience more positive interactions with their peers and earn higher scholastic marks in their classes (Hu & Kuh, 2002; Kuh, Cruce, Shoup, Kinzie & Gonyea, 2008). These positive outcomes in both academic and social realms are likely to augment student's academic self-concept considering the reciprocal relationship between academic performance and academic self-concept.

Qualitative studies indicate that resilient Black collegians actively battle negative educational contexts by engaging in activities that sustain their academic self-confidence and remain commited to completing their educational programs despite the presence of

racism or other barriers (Akom, 2003; O'Connor, 1997). These students demonstrate confidence in their intellectual capabilities and academic acumen in their quest to attain their educational goals. Resilience through academic engagement allows Black students to engage in active problem solving and meaning-making, which contributes to positive academic and social outcomes (Barbarin, 1993; Carter, 2008; Sax & Arms, 2008). Resilience in the form of social engagement involves students accessing familial, peer and community social supports to negate invalidating and racist college milieus (Barnett, 2004). Together, these two forms of engagement provide Black collegians with effective strategies to overcome barriers, maintain cultural continuity, and sustain positive evaluations of their academic abilities. Available evidence suggests that the two mechanisms of resilience (academic and social engagement) and academic self-concept are likely to be positively linked to each other.

Hypothesis 2e: It is predicted that academic self-concept and racial centrality will be positively correlated.

Rationale 2e: Previous research suggests that for many African Americans academic identity and racial identity are linked. Some researchers have found that racial identity strengthens academic connections (Sellers et al., 1997), whereas other researchers indicate that strong racial identitification hampers academic identification (e.g., Fordham & Obgu, 1986). Other research suggests that racial identity has limited (Lockett & Harrell, 2003) or no relationship (Awad, 2007) with academic achievement. Despite the conflicting evidence, it is clear that how one perceives their racial group membership can play a critical role in their academic success (Cokley et al., 2012;

Osborne & Jones, 2011). Black learners who have internalized negative messages regarding the academic capacities of Blacks may feel that academic excellence and Blackness are incompatible, thus negatively impacting their academic self-perceptions (Okeke et al., 2009). In the educational climate that highlights the "racial achievement gap", Black students with high racial centrality may be particularly vulnerable to identity challenges and disidentification if they endorse negative racial stereotypes. For other Black students, their racial group membership may provide a buffering influence and thus can positively influence their scholastic engagement and performance (Akom, 2003; K. Marsh, 2012). Students with this perspective will likely have stronger academic identities and performance.

There has been limited explorations of academic self-concept and racial identity generally and racial centrality specifically, particularly among Black collegians. Sellers and colleagues' (1997) work on dimensions of racial identity provides a more nuanced way to explore the effects of racial identity on academic identity rather than global self-concept. Two separate studies by Cokley found gender differences in the relationship between academic self-concept and racial centrality. The results revealed a positive relationship between academic self-perceptions and racial centrality for women and an inverse pattern of these results for Black men. In contrast, Sellers et al. (1998) found that racial centrality was positively associated with academic achievement. While the results are mixed on the relationship between academic self-concept and racial centrality, it is clear that racial centrality is an important variable for Black students (Cokley, 1999). This study predicts that a positive relationship will exist between academic self-concept

and racial centrality. Considering that we are living in the Age of Obama, it may be that the presence of an educated Black family may influence how Black collegians are defining themselves in relation to race and achievement (Fuller-Rowell, Burrow & Ong, 2011).

Analysis 2a-e: These research questions will be answered by calculating the Pearson's correlation coefficient between students' overall scores on the ASCS, UES, CCU, SPIS (Respectful Interactions and Caring Attitudes subscales), CRQ, RCS, and students' overall ASCS score.

Research Question 3: Which independent variables predict academic achievement in this sample?

Hypothesis 3a: It is predicted that academic engagement would account for a significant amount of variance in cumulative GPA over and above that accounted for by academic self-concept.

Rationale 3a: A plethora of empirical studies document that academic self-concept is a powerful predictor of academic performance (Awad, 2007; Cokley 2002a; Cokley et al., 2012). The reciprocal effects model indicates that high levels of academic self-concept are predictive of higher levels of academic achievement and vice versa (Marsh & O'Mara, 2008). Consistent with these prior studies, it is hypothesized that academic self-concept will significantly predict GPA.

While academic self-concept represents the beliefs students have about their competence in academic settings, academic engagement comprises the behaviors that students use in this setting. Student outcomes researchers acknowledge the primacy of

student engagement in positive academic outcomes (Tinto, 1993). By assessing more behavioral aspects of academic performance, academic engagement provides a more concrete evaluation of how Black students perceive they are functioning within an academic environment. Using a large, representative sample, Kuh et al. (2008) found that student engagement in educationally purposeful activities significantly predicted academic performance for first-year collegians. They also discovered that these engagement effects were more powerful predictors for Black students than White students in the sample.

Another study showed that academic engagement was correlated with stronger academic marks (Svanum & Bigatti, 2009). Despite environmental barriers to academic success, resilient students display enhanced problem-solving skills, critical consciousness, and a future-oriented outlook (Griffin & Allen, 2006). Collegians who endorse higher levels of academic engagement garner higher course grades and cumulative GPA than their less resilient peers (Carlson, 2001). Using nationally representative data from the National Longitudinal Survey of Freshmen, Fisher (2007) demonstrated that Black students who reported more formal academic connections and higher levels of formal social engagement were more likely to persist. Thus, considering the strong relationship between academic engagement and overall grade performance, academic engagement should explain additional variance in the prediction of GPA above and beyond that predicted by academic self-concept.

Hypothesis 3b: It also predicted that racial centrality will account for a significant amount of variance in overall GPA over and above that accounted for by academic self-concept and academic engagement.

Rationale 3b: While racial identity and academic outcomes have received generous media and scholarly attention, less information is available using the multidimensional aspects of racial identity as formulated by Sellers et al. (1998). In this model, racial centrality is defined as how important race is as a fundamental aspect of an individual's definition of their self. For Black collegians, high racial centrality may be positively linked with academic performance as Blacks for whom race is central may strive to perform better academically (Sellers et al., 1998). To the extent that one's racial group membership is important to an individual's self-identity and they do not subscribe to negative characterizations of their group, they will likely not behave in a manner that would negatively affect how they and others perceive Black students on a predominately White campus.

While racial centrality is viewed as an important aspect of the academic process for Black students, the results are mixed on whether it exerts a positive or negative influence on academic outcomes. Sellers et al. (1998) found that racial centrality was positively associated with cumulative GPA for Black students attending a historically Black institution. In one study, racial centrality positively correlated with academic performance for Black women, while it had no significant relationship with GPA for Black men (Cokley, 2001a). Cokley and Moore (2007) found that racial centrality negatively correlated with academic performance for Black men but had no significant

relationship for Black women. These authors also found that gender moderated the relationship between GPA and racial centrality such that women with higher racial centrality had higher GPAs whereas men with high racial centrality had lower GPAs. Although racial identity represents an important component of academic life for many Black students (Cokley, 1999), Sellers et al. (1998) cautioned that racial identity would likely not be a powerful predictor of academic performance, particularly when it is included with more proximal predictors of GPA. Despite the potentially limited explanatory power of racial centrality, it is important to evaluate its influence in academic matters. For this reason, it will be entered in the regression equation after academic self-concept and academic engagement have entered to evaluate whether it contributes to explaining any unique variance.

Analysis 3a-b: Hierarchical multiple regression will be used to address this research question. This data-analytic strategy is used when researchers are interested in sequentially evaluating the relative importance of individual predictor(s) when predicting a criterion variable, over and beyond the variance accounted by previously entered variables (Petrocelli, 2003). The overall regression model will be tested for significance by inspecting the F-value associated with the current model. Within hierarchical regression, the focus is on significant increments in explained variance associated with the individual variables entered in the subsequent steps above and beyond that explained by predictor variables already in the regression equation. As such, we are most interested in the change in variance explained (ΔR^2), its associated change in F (ΔF^2) and its p-value (Petrocelli, 2003). Next, the R^2 associated with the model will be reviewed. R^2

represents the proportion of the variance in the criterion variable accounted for by the overall model; that is, it is an index of the predictive power of GPA if we know a students' scores on a specific predictor variable (Cohen et al., 2002). Given that R^2 tends to overestimate the prediction power of our model, adjusted R^2 will also be inspected and reported. Adjusted R^2 provides a more conservative measure of the prediction power of our overall model since it accounts for the number of participants and predictor variables in the model.

Finally, inspecting the standardized regression coefficients (β) highlights which predictor variables have the strongest influence on the criterion variable (students' GPA), holding all the other predictors constant (Cohen et al., 2002). These standardized regression coefficients or beta weights are measured in standard deviations and they illustrate the change in the criterion variable when the predictor variable increases by one unit; higher beta weights indicate a predictor has a stronger influence on the criterion variable. All significant beta weights will be reported. Petrocelli (2003) reminds us to focus on the β coefficient associated with a predictor primarily in the step it enters the regression equation.

For this study, significant demographic variables will be controlled for in the first step. Following in the second step, academic self-concept will be entered. At step three, academic engagement will follow. The final step will include racial centrality.

Research Question 4: Which independent variables significantly predict academic self-concept in this sample?

Hypothesis 4a: It is predicted that perceptions of the university environment, cultural congruity, respectful interactions with faculty and caring interactions with faculty would account for a significant amount of variance in academic self-concept over and above that accounted for by racial centrality.

Rationale 4a: Given the close association between and study of racial identity and academic identity, racial centrality will be controlled for in the regression analyses. Using their multidimensional model of racial identity, Sellers et al. (1997) reminds us that the relevance of race for individuals has import for understanding how individuals construe what it means to be Black. For some Black students, academic identity and racial identity may be linked such that strong academic performance is consistent with their views of being Black and thus enhances their racial connections to their racial group. By removing the effects of this influence, we can assess how psychosociocultural influences (perceptions of the university environment and cultural congruity) and student-faculty interactions (caring attitudes of faculty and respectful interactions with faculty) help to predict academic self-concept.

Marsh and O'Mara (2008) emphasize the role of environmental factors, such as evaluative feedback from significant others, instructors and peers, in shaping the learner's self-identity and beliefs. College impact scholars argue that these socioenvironmental cues are different for Black students given the ubquitious negative societal messages about the academic abilities of this group (Cabrera et al., 1999), particularly for those at historically White campuses. Researchers confirm that feelings of cultural incongruity resulting from isolation, marginalization and racist encounters with students and faculty

assault students' sense of belonging and their academic self-beliefs (Harper & Hurtado, 2007; Steele, 1999). Considering the chronic denigration of the academic abilities of Blacks, these ubiquitious attacks on the academic psyche of Black collegians may have a negative cumulative impact on the self-concept and subsequent cultural adjustment of these students (Steele & Aronson, 1995; Tuitts & Carter, 2008).

The predictive power of student-faculty interactions on academic self-concept has been demonstrated in previous scholarship (e.g., Cokley, 2000a; Cokley, 2002a; Cokley et al., 2003). Respectful interactions with professors can indicate to Black students that instructors believe in their academic potential and are concerned with their future professional and personal well-being (Jackson, Starobin & Laanan, 2013). These interactions that demonstrate both respect and caring help to strengthen Black students academic skillsets, which may enhance their overall evaluation of their academic competence (Cohen & Steele, 2002). Black college students will likely be attuned to environmental cues within this learning context and they can potentially influence academic self-concept. These cues may be taken from the quality of student-professor interactions, general perceptions of the campus climate or overall cultural match.

Considering the bidirectional relationship that exists between the psychosociocultural influences and student-faculty relationships, they will be entered simultaneously into the regression equation. For example, the quality of student-faculty relationships can affect how Black students perceive the university environment and their fit within this setting. Conversely, how Black collegians perceive the university and their

cultural match within it may affect their subsequent assessment of student-professor relationships.

Hypothesis 4b: It is predicted that academic engagement and social engagement would account for a significant amount of variance in academic self-concept over and above that accounted for by perceptions of the university environment, cultural congruity, racial centrality, respectful interactions with faculty and caring interactions with faculty.

Rationale 4b: Academic self-concept consists of the individual's evaluation of their competence in academic settings (Osborne & Jones, 2011). One's assessment of their scholastic abilities is evaluated through their activities and is likely evidenced in their level of academic and social engagement. By accounting for the influence of psychosociocultural influences, racial centrality, and student-faculty relationships, we can better understand how academic and social engagement attitudes affect how students evaluate their academic self-concept.

Academically and socially engaged students are characterized by strong beliefs in their intellectual abilities and their work ethic to withstand the academic adversity and intellectual challenges they face (O'Conner, 1997), leading them to be characterized as academically resilient. Students who are academically and socially engaged on their campuses are more likely to have higher appraisal of their academic strengths based on their ability to hone these skills in both formal and informal scholastic venues. Even in less-than-optimal educational settings, engaged Black students are capable of maintaining their achiever identities and producing positive outcomes (Griffin & Allen, 2006). Informed by the current literature on the mechanisms of resilience (academic and social

engagement) and academic self-concept, it is expected that academic and social engagement will be significant predictors of academic self-concept above and beyond the effects of the psychosociocultural influences, student-professor interactions and racial centrality.

Analysis 4a-b: A second hierarchical multiple regression will be used to answer this research question. The first block will control any significant demographic variables. At block two, racial centrality will be entered. Block three will contain perceptions of the university environment, cultural congruity, racial centrality, respectful interactions with faculty and caring interactions with faculty. The final block will hold academic and social engagement. The analyses will focus on significant ΔR^2 and its associated ΔF and the p-values. The beta weights (β) for each significant predictor at each step will be reported.

Chapter 3

Methods

Participants

Students who self-identified as Black or African American and who are enrolled at a historically white university comprised the study's sample. Participants were drawn from the University of Texas at Austin's College of Education's subject pool as well as the Psychology 301 subject pool. Other participants were recruited from various sources using convenience and snowball sampling techniques. For example, participants were solicited through direct solicitation of various Black student organizations. Other participants were recruited via Black Studies courses and through announcements on listservs designed for Black collegians. All students were asked to enter a unique code to detect duplicate entries.

An a priori power analysis was executed using the G*Power3.1.2 program (Faul, Erdfelder, Lang & Buchner, 2007) to assess the necessary sample size needed to detect significant findings. Given an alpha of .05, a power level of .80, and moderate effect size of .30, a minimum sample size of 131 will be required. Tabachnick and Fidell (2000) recommend that sample size should equal the number of predictors plus 104 or the number of predictors times 8, plus 50 when utilizing regression analyses. In order to attain an acceptable power level of .80, a total sample of approximately 200 Black collegians will be recruited for the final sample.

The final sample consisted of 253 Black college students. Of these individuals, 179 (70%) identified as African American/Black, 41 (16%) as African, 25 (10%) as

bi/multiracial, 7 (3%) biracial Caribbean and 2 (<1%) as Caribbean. There were 165 (65%) women and 88 men in the sample. In terms of classification, there were 41 freshmen, 45 sophomores, 58 juniors, 65 seniors, and 44 graduate students. The mean age of participants was 21.85 years old (SD = 4.23).

The majority of the sample identified as middle class (55%) or working class (32%). Participants were asked place themselves on a 10-step ladder where step 1 signifies those Americans were worst off and step 10 indicates those Americans who were best off. On the SES ladder, the bulk of the students placed themselves on rungs 5 (26%), 6 (23%) or 7 (19%). Participants reported their mother's education level no high school diploma (4%), high school diploma (17%), some college (21%), associate's degree (12%), bachelor's degree (27%), master's degree (13%), and advanced degrees (6%). Father's educational level was reported as no high school diploma (4%), high school diploma (25%), some college (18%), associate's degree (9%), bachelor's degree (23%), master's degree (14%), and advanced degrees (7%).

Prior to college, participants had attended predominately White (32%), predominately Black (25%) and half Black (13%) high schools. The racial make-up of their neighborhoods was mostly Black (36%), mostly White (32%), and half Black (11%). On average, participants were involved in 1.83 (SD = 1.62) extracurricular activities. The average GPA in the sample was 3.21 (SD = .54).

Measures

Academic Self-Concept Scale. The Academic Self-Concept Scale (ASCS; Reynolds, 1988) evaluates the academic component of self-concept in college students. This instrument contains 40 items measured on a 4-point Likert-type scale ranging from 1 (strongly disagree) to 4 (strongly agree). Higher scores indicate more positive academic self-beliefs. Sample items include "Being a student is a very rewarding experience" and "I consider myself a very good student." Cokley (2003) reported a Cronbach's alpha of .91 in his analysis with Black collegians using the ASCS. Construct validity has been demonstrated through positive associations with GPA for Black postsecondary learners (Awad, 2007). For the current study, Cronbach's alpha for the ASCS was .94.

University Environment Scale. The University Environment Scale (UES; Gloria & Robinson Kurpius, 1996) assesses minority students' perceptions of their university's environment. It utilizes 14 items scaled on a 7-point Likert-type scale with five reversed scored items. Scores can range from 14 to 98 with higher scores suggesting a more positive evaluation of the institution's environment. Typical items include statements such as "The university seems to value minority students" and "The university seems like a cold, uncaring place to me" (reverse scored). Analysis of the psychometric properties of the UES revealed a coefficient alpha of .81 with an African American undergraduate sample (Gloria, Robinson Kurpius, Hamilton & Willson, 1999). Internal consistency for the UES in the current investigation was acceptable at .84. Evidence of convergent validity was established through correlations with existing campus climate measures (Gloria & Robinson Kurpius, 1999). It is recommended that the UES and the Cultural

Congruity Scale (CCS) be administered conjointly to achieve a holistic understanding of both the subjective and objective aspects of the campus climate.

Cultural Congruity Scale. Developed by Gloria and Robinson Kurpius (1996), the Cultural Congruity Scale (CCS) is designed to measure the degree of perceived compatibility between the university's values and norms and racial/ethnic minority students' native cultural value systems. This instrument contains 13 items measured on a 7-point Likert-type scale with scores ranging from 13 to 91. Higher scores indicate higher perceived cultural congruity. Sample items include "I try not to show the parts of me that are 'ethnically' based" and "I feel that my language and/or appearance make it hard for me to fit in with other students." Analyses of the CCU produced an initial coefficient alpha of .89 for the original Latina/o sample (Gloria & Kurpius, 1996). A Cronbach's alpha of .93 was found in a sample of Black undergraduates (Constantine and Watt, 2002). Gloria and Robinson Kurpius (1996) demonstrated the predictive validity of the CCS using regression analyses showing higher persistence rates among those students with higher CCS scores. This measure had an acceptable Cronbach's alpha of .84 in the current study.

Student-Professor Interaction Scale. Cokley and colleagues (2004) created the Student Professor Interaction Scale (SPIS) to comprehensively assess the various interactions that occur between students and university faculty members. The SPIS consists of 40 items measured on a 7-point Likert-type scale with higher scores indicating positive student-faculty interactions. The SPIS consists of the nine subscales: Respectful Interactions; Career Guidance; Approachability; Caring Attitude; Off-Campus

Interactions; Connectedness; Assessibility; Negative Experiences; and a validity scale. The validity scale assesses whether students perceive student-professor interactions to be important to them. The current study will only utilize the Respectful Interactions, Caring Attitudes and Validity subscales. Sample items from the scale include "Professors show respect for ethnic minority students" and "I believe that there is at least one professor who cares about my well-being." Previous Cronbach's alpha for the full scale was .90 and .87 for Respectful Interactions and Caring Attitudes, respectively (Cokley et al., 2006). Komarraju, Musulkin and Bhattacharya (2010) reported positive correlations between the SPIS and Black students' instrinsic and extrinsic motivation levels, thus providing evidence of construct validity. Cronbach's alpha was .93 for the Respectful Interactions subscale, .87 for the Caring subscale and .79 for the Validity subscale in the current study.

College Resilience Questionnaire. The College Resilience Questionnaire (CRQ; Carlson, 2001) is designed to measure the antecedents of resilience in a college sample. It consists of 27 items measured on a 5-point Likert-type scale ranging from 1 (always false) to 5 (always true). "I am a good problem solver on academic things" and "I keep going when things are tough in classes" comprise representative items on this instrument. Factor analyses revealed that this instrument taps into two underlying factors: academic and social engagement. Strong reliability estimates were found in Carlson's (2001) study with a Cronbach's alpha of .94 for the academic engagement subscale and .86 for the social engagement subscale being reported with a hetereogenous population. Reynolds, Sneva and Beehler (2010) reported a reliability estimate of .95 for academic engagement

and .87 for social engagement subscales in a hetereogenous undergraduate sample. Convergent validity of the CRQ was demonstrated through positive correlations with hope, intrinsic goal orientation, self-efficacy and students' study habits (Carlson, 2001). Carlson demonstrated adequate predictive validity of the CRQ through positive correlations with intentions to persist. Cronbach's alpha was .93 for the Academic Engagement subscale and .80 for the Social Engagement subscale for the current sample.

Racial Identity. Racial identity was assessed using the Racial Centrality Scale (RCS; Sellers, Rowley, Chavous, Shelton & Smith, 1997). The RCS contains 8 items on a 7-point Likert-type scale with three reversed scored items. Sample items include "In general, being Black is an important part of my self-image." and "Being Black is an important reflection of who I am." Cokley and Moore (2007) reported an internal consistency of .70 for the RCS in their study of African American college students. Convergent validity was shown for the RCS via strong correlations between high levels of interactions with other Blacks and taking Black studies courses (Sellers et al., 2007). In this study, Cronbach's alpha was .86 for the Racial Centrality subscale.

Demographic Questionaire. A brief demographic survey solicited information on race/ethnicity, gender, age, classification (year in school), cumulative GPA, socioeconomic status (SES), current academic major and minor, parental education level, and participation in extracurricular activities (e.g., fraternities, student organizations, etc).

Procedures

The study was conducted in compliance with all applicable guidelines and procedures established by the University of Texas at Austin's Institutional Review Board

for the Protection of Human Subjects. The proposed study also conformed to the American Psychological Association's (APA) Ethical Principles of Psychologists and Code of Conduct. All study participants completed informed consent forms prior to their participation in the study. They were informed that their participation in the study was voluntary and that they could withdraw from the study at any time sans penalty. Students completed all surveys using Qualtrics, a popular web-based survey tool. Participants were able to take the survey at any location of their choosing. They were informed that the online survey should take no more than 35 minutes to complete. As an incentive for their participation, interested students were eligible to win one of four twenty-five dollar gift cards. Participants recruited through classes were provided extra credit from their course instructors.

Chapter 4

Results

Preliminary Analyses

The variables under investigation are perceptions of the university environment, cultural congruity, student-professor interactions, academic resilience, racial centrality, academic achievement (cumulative GPA) and academic self-concept among African American collegians. One-way ANOVAs were used to detect mean differences among participants on the demographic variables (e.g., gender, year in school, SES, and family background variables, etc.) prior to proceeding with regression analyses. Subsequent regression analyses controlled for any significant differences detected among participants on the demographic variables. Prior to conducting regression analyses, several assumptions were tested to assess for potential violations (Osborne & Waters, 2002). When any violations were discovered, appropriate measures were taken to counteract them. First, the normality of the data was evaluated by plotting the residuals (Tabachnick & Fidell, 2000). These scatterplots were used to assess for potential outliers, homoscedasticity and linearity of the data (Osborne & Waters, 2002). Skewness and kurtosis within the current data was assessed. Next, multicollinearity was assessed by evaluating whether the Variance Inflation Factor (VIF) is less than 4 and the tolerance factors do not exceed .2 (Tabachnick & Fidell). Finally, descriptive statistics and correlations for all variables were reported.

The data were inspected for normality using normal Q-Q plots, histograms, skewness and kurtosis values. The data plots were visually inspected for outliers, the Q-Q plots were examined to test the assumption of normality, and homoscedascity was assessed by visual inspection of the standardized residuals (Osborne & Waters, 2002). Skewness values for the dependent variables ranged from .29 to -1.00. These values indicate an acceptable symmetry of the distribution (Pallant, 2001). Kurtosis values were acceptable with the highest kurtosis value being 1.31. When the sample size is large (e.g., 200+ participants), the risk associated with high kurtosis values are reduced (Tabachnick & Fidell, 1996). Tolerance values below .20 suggest multicollinearity concerns (Tabachnick & Fidell). In the current study, tolerance values ranged from .33 to .73. VIF values greater than 10 suggest problems with multicollinearity (Tabachnick & Fidell). VIF values ranged from 1.37 to 3.03 for the current study. The linearity of the relationship between residuals and predicted dependent variable scores was assessed using residuals scatterplots of the data (i.e., normality P-P plots of the regression standardized residual and a scatterplot of standardized residuals).

Prior to conducting regression analysis to answer Research Questions 2 and 4, a series of t-tests and ANOVAs were conducted to assess for differences in gender, age, classification, SES, and parental education levels on the predictor and criterion variables. Given the number of tests being conducted, the probability level of .05 was adjusted with the Bonferroni test. An alpha level of .008 ($\alpha/6$) was used for significance testing. No statistically significant gender differences were detected. Age was split into two groups: (a) 18-22 years old and (b) above 23 years old. An independent samples t-test assessed

age differences on the independent variables. Results revealed that significant differences between the two groups on racial centrality, $t = -3.11$, df = 244, $p < .01$. Racial centrality scores were higher among older students (39.64) than younger students (35.53).

In the presence of unequal sample sizes, Levene's Test of Equality of Error Variance offers limited protection against inflation of Type I error (Zimmerman, 2004). In cases where Levene's test is significant, the Welch test provides a robust test since it does not require homogeneity of variances and is useful when unequal group sample sizes (Zimmerman). If the Welch test is significant, Games-Howell was used for post hoc comparisons.

A one-way ANOVA was conducted to assess for differences in classification on each of predictor and criterion variables. The results of the Levene's test were significant for the following variables: Academic Engagement, Levene (4, 238) = 2.61, $p < .05$; and Caring Faculty, Levene (4, 244) = 3.85, $p < .01$. Due to inequality of variance in these two variables, the Welch test was used. The results of the Welch test were significant as well for these two variables: Academic Engagement, Welch (4, 115.936) = 7.79, $p < .001$; Caring Faculty, Welch (4, 113.781) = 6.41, $p < .001$. Results for the one-way ANOVA exploring the impact of classification on the predictor and criterion variables revealed statistically significant mean differences between classification and Academic Self-concept, F (4, 218) = 5.06, $p < .001$, Academic Engagement, F(4, 238) = 5.21, $p < .001$, Racial Centrality, F (4, 244) = 9.34, $p < .001$; and Perceptions of Caring Faculty, F (4, 244) = 5.82, $p < .001$. Planned comparisons using Tukey's HSD indicated graduate

students possessed higher academic self-concept than freshmen (121.17 vs. 106.29), sophomores (108.28), juniors (110.62), and seniors (111.34). Tukey's HSD post-hoc tests indicated graduate students possessed higher racial centrality than freshmen (45.55 vs. 33.82), sophomores (35.26), juniors (38.10), and seniors (37.03). Games-Howell post-hoc test results showed that academic engagement was higher among graduate students than freshmen (80.44 vs. 73.46), sophomores (70.37), and seniors (72.94). Post-hoc tests revealed graduate students reported higher perceptions of caring faculty than freshmen (23.49 vs. 19.88), sophomores (19.00), and seniors (20.34). Juniors had also reported higher perceptions of caring faculty than sophomores (22.30 vs. 19.00).

SES was explored next. The results of the Levene's test were significant for UES, Levene (2, 236) = 3.74, $p < .05$. Robust post-hoc tests revealed no significant SES error variance differences for UES, Welch (2, 52.18) = 2.45, $p > .05$. One-way ANOVA results revealed no statistically significant differences between working class, middle class and upper class participants on the independent variables after adjusting the critical value.

ANOVA was used to explore the impact of mother's educational level and the predictor and criterion variables. Prior to conducting the ANOVA, a violation of the equal variances assumption was found for Academic Engagement, Levene (6, 235) = 2.88, $p < .010$; and Perceptions of Caring Faculty and mother's educational level, Levene (6, 241) = 2.47, $p < .05$. Post-hoc tests found no significant differences in error variances for Academic Engagement, Welch (6, 57.18) = 1.96, $p > .05$; and Perceptions of Caring Faculty, Welch (6, 61.89) = 1.35, $p > .05$. Results revealed statistically significant

differences in Cultural Congruity based on mother's educational level, $F (6, 236) = 3.24$, $p < .01$. Black collegians who reported their mothers possessed some college education endorsed higher cultural congruity than those with mothers who have only a high school diploma (70.98 vs. 61.51) and an associate's degree (62.29).

Finally, one violation in the equal variances assumption was found for father's educational level on Racial Centrality, Levene $(6, 239) = 2.30$, $p = .05$. Robust post-hoc tests found similar significant error variances for racial centrality, Welch $(6, 63.86) = 2.91$, $p < .05$. ANOVA results revealed no statistically significant differences on the predictor and criterion variables based on father's educational level after applying the adjusted alpha level. Based on these results, classification, age and mother's educational level will be controlled for in subsequent regression analyses.

Descriptive Statistics

Bivariate relationships between the variables in the study were explored using Pearson product correlations. To control for inflation of Type I error, a Bonferroni correction was applied. The new alpha level was set at .003 (.05/15). Research Question 1 postulated that perceptions of the university environment, cultural congruity, respectful interactions with faculty, caring interactions with faculty, racial centrality, academic and social engagement and academic self-concept would be positively correlated with cumulative GPA.

Consistent with predictions for Research Question 1, cumulative GPA was strongly correlated with academic self-concept ($r = .49$). Individuals with higher GPAs

possessed higher academic self-concept scores. GPA was also correlated with the academic engagement subscale of the CRQ (r = .26). Black students who endorsed higher academic engagement behaviors garnered high scholastic grades. Finally, GPA was positively correlated with racial centrality (r = .30). For students who viewed race was an important aspect of their daily lives, cumulative school performance was higher. Thus, three hypotheses from Research Question 1 were supported. Academic self-concept, academic engagement and racial centrality had significant positive correlations with overall GPA.

Research Question 2 explored whether perceptions of the university environment, cultural congruity, respectful interactions with faculty, caring interactions with faculty, racial centrality, and academic and social engagement would be positively correlated with academic self-concept. Academic self-concept was positively correlated with perceptions of the university environment (r = .39) and cultural congruity (r = .31). For students who evaluated the campus more positively and felt a fit on campus, academic self-concept was higher. The perceptions of caring attitudes by faculty (r = .40) and respectful interactions with them (r = .32) was positively linked to academic self-concept. Black collegians who perceived more caring and respectful interactions with faculty possessed higher levels of academic self-concept. Both academic engagement (r = .74) and social engagement (r = .33) were positively associated with academic self-concept. Students who endorsed higher levels of academic and social engagement attitudes, academic identity was higher. Finally, racial centrality (r = .26) was significantly correlated with academic self-concept.

For Black students who viewed their race as central to their identity academic self-beliefs were higher.

For Research Question 2, all seven hypothesized relationships were confirmed. As predicted, significant positive correlations were found between perceptions of the university environment, cultural congruity, respectful interactions with faculty, caring interactions with faculty, racial centrality, and academic and social engagement and academic self-concept. Tables 1 and 2 presents means, standard deviations, internal consistency, range and intercorrelations for all the study's variables.

Hierarchical Multiple Regression Analyses

Two hierarchical multiple regression analysis were performed to answer Research Questions 3 and 4. Research Question 3 explored whether academic engagement would account for a significant amount of variance in cumulative GPA over and above that accounted for by academic self-concept (Hypothesis 3a); it also explored whether racial centrality would account for a significant amount of variance in overall GPA over and above that accounted for by academic self-concept and academic engagement (Hypothesis 3b). In the first hierarchical multiple regression designed to address Research Question 3, predictor variables were academic self-concept, academic engagement and racial centrality. The criterion variable was cumulative GPA. Based on the significant preliminary testing results, classification, age and mother's educational level were controlled for in the first step. Academic self-concept was entered in the second step. Academic engagement followed in the third block. In the final step, racial centrality was entered (See Table 3).

Results of the first hierarchical multiple regression analyses revealed that GPA was significantly predicted by the demographic variables of age, classification and mother's educational level, F (3, 208) = 5.09, $p < .01$, adjusted $R^2 = .06$. An examination of the beta weights indicated that classification was the only significant predictor ($\beta = .33$, $p < .001$). The predictive power of the model improved significantly by adding academic self-concept, F (4, 207) = 17.86, $p < .001$, adjusted $R^2 = .24$; $\Delta R^2 = .19$, ΔF^2 (1, 207) = 52.41, $p < .001$, accounting for an additional 18.8 percent of the variance in cumulative GPA. Academic self-concept represented the only significant predictor ($\beta = .45$, $p < .001$) in the second step.

In the third step, the predictive power of the model improved significantly by adding academic engagement, F (5, 206) = 15.85, $p < .001$, adjusted $R^2 = .26$; $\Delta R^2 = .02$, ΔF^2 (1, 206) = 6.07, $p < .05$, accounting for an additional 2.1 percent of the variance in cumulative GPA. Inspecting the beta weights, significant predictors of GPA were academic self-concept ($\beta = .61$, $p < .001$) and academic engagement ($\beta = -.22$, $p < .05$). In the fourth step, the predictive power of the model improved significantly by adding racial centrality, F (6, 205) = 15.19, $p < .001$, adjusted $R^2 = .29$; $\Delta R^2 = .03$, ΔF^2 (1, 205) = 8.85, $p < .01$, accounting for an extra 3.0 percent of the variance in cumulative GPA. In the final model, academic self-concept ($\beta = .60$, $p < .001$), academic engagement ($\beta = -.24$, $p < .010$) and racial centrality ($\beta = .19$, $p < .010$) were significant predictors of GPA.

Research Question 4 was examined using a second hierarchical regression equation. Research Question 4 explored whether perceptions of the university

environment, cultural congruity, respectful interactions with faculty and caring interactions with faculty would account for a significant amount of variance in academic self-concept over and above that accounted for by racial centrality (Hypothesis 4a); it also examined whether academic engagement and social engagement would account for a significant amount of variance in academic self-concept over and above that accounted for by perceptions of the university environment, cultural congruity, racial centrality, respectful interactions with faculty and caring interactions with faculty (Hypothesis 4b). Predictor variables were perceptions of the university environment, cultural congruity, racial centrality, perceptions of caring faculty, respectful interactions with professors, and academic and social engagement. The criterion variable was academic self-concept. Based on preliminary testing results, classification, age, and mother's educational level were controlled for in the first step. Racial centrality was entered in the second step. Perceptions of the university environment, cultural congruity, perceptions of caring faculty and respectful interactions with professors followed in the third block. In the fourth block, academic and social engagement were entered (See Table 4).

Results from the second hierarchical multiple regression revealed that academic self-concept was significantly predicted by classification, age and mother's educational level, F (3, 212) = 5.90, $p < .001$, adjusted $R^2 = .06$. An inspection of the beta weights revealed that classification ($\beta = .38$, $p < .001$) was the only significant predictor in block one. With the addition of racial centrality, the predictive power of the model improved significantly, F (4, 211) = 6.58, $p < .001$, adjusted $R^2 = .09$; $\Delta R^2 = .03$, ΔF^2 (1, 211) = 8.02, $p < .01$, accounting for an additional 9.4 percent of the variance in academic self-concept.

Classification (β = .31, p < .010) and racial centrality (β = .19, p < .01) represented the only two significant predictors.

In the third step, perceptions of the university environment, cultural congruity, perceptions of caring faculty and respectful interactions with faculty significantly improved the model's predictability, F (4, 211) = 12.01, p < .001, adjusted R^2 = .29; ΔR^2 = .21, ΔF^2 (4, 207) = 15.61, p < .001, accounting for 29.1 percent of the variance in academic self-concept. Classification (β = .23, p < .05), racial centrality (β =.25, p < .001), perceptions of the university environment (β = .19, p < .05), cultural congruity (β = .25, p < .01) and caring interactions with faculty (β = .17, p < .05) were significant predictors for step three. Including academic and social engagement in the regression equation added a significant increment in variance explained, F (10, 205) = 31.68, p < .001; adjusted R^2 = .59; ΔR^2 = .29, ΔF^2 (2, 205) = 75.71, p < .001, accounting for 58.8 percent of variance explained in academic self-concept scores. For the final model, academic engagement (β =.71, p < .001), social engagement (β = -.18, p < .010), cultural congruity (β = .19, p < .010), racial centrality (β = .12, p < .05) were significant predictors of academic self-concept.

Post-Hoc Moderation Analyses

Given the findings that racial centrality, academic engagement and academic self-concept represented the only significant predictors of GPA, post-hoc moderation analyses were undertaken to explore further the relationships between these variables. While academic self-concept is an established correlate of GPA (Cokley, 2000b), less information is available on how academic engagement or racial centrality may affect the

relationship between academic self-beliefs and academic performance. The author speculated that academic engagement might moderate the relationship between academic self-concept and GPA such that those Black students who were higher in academic engagement would possess a stronger relationship between academic self-concept and GPA compared to those students who were lower in academic engagement. The author also questioned whether racial centrality would moderate the relationship between academic self-concept and GPA with the relationship between academic self-concept and GPA being stronger for those higher in racial centrality than for those who were lower in racial centrality.

Following Baron and Kenny's (1986) guidelines on testing for moderators, the first step involved centering the continuous predictor and moderator variables. For this study, the predictor variable was academic self-concept while academic engagement and racial centrality served as moderators. Converting continuous variables reduces multicollinearity concerns and aids in the interpretation of the subsequent effects of the predictor and moderator (Frazier, Tix & Barren, 2001).

Using the newly created standardized predictor and moderator variables, a product term of these two variables was created. One term reflected the product of academic self-concept and academic engagement; the other term represented the product of academic self-concept and racial centrality. Next, a hierarchical multiple regression equation was created by entering the standardized predictor and moderator variables (academic self-concept and academic engagement) in the first block followed by their product term in the second block. This regression equation tested whether academic

engagement moderated the relationship between academic self-concept and GPA. Using a separate regression equation, a similar process was completed with academic self-concept and racial centrality entering in the first step and their product term following in the second step to test if racial centrality moderated the relationship between academic self-concept and GPA.

Frazier, Tix and Kenny (2001) highlighted three steps for interpreting hierarchical multiple regression analyses: (a) interpreting the effects of the predictor and moderator variables, (b) evaluating the significance of the moderator, and (c) if significant moderator effects are found, plotting the moderator effects. The author first tested whether academic engagement moderated the relationship between academic self-concept and GPA. In step one, academic self-concept and academic engagement collectively explained a significant amount of variance in GPA, F (2, 205) = 33.18, $p < .01$, $R^2 = .25$. In step two, entering the interaction term failed to predict a significant additional increment in the variance of GPA, F (3, 204) = 22.01, p <. .01, $R^{2 =} .25$; B = .002, p > .05. Thus, academic engagement does not moderate the relationship between academic self-concept and GPA (See Table 5).

The author next tested whether racial centrality moderated the relationship between academic self-concept and GPA. At step one, academic self-concept and racial centrality explained a significant portion of the variance in GPA, F (2, 207) = 38.30, $p < .01$, $R^2 = .26$. At step two, the interaction term failed to explain any unique variance in GPA, F (3, 206) = 25.63, $p < .01$, $R^2 = .26$; B = -.02, p > .05. Racial centrality, therefore,

does not moderate the relationship between academic self-concept and GPA (See Table 6).

Chapter 5

Discussion

The purpose of this study was to examine psychosociocultural, interpersonal and intrapersonal influences as predictors of academic self-concept and academic achievement. Traditionally, scholars have focused on a limited number of predictors of academic performance (e.g., academic self-concept, self-efficacy, etc.) and eschewed a focus on psychosociocultural, environmental, and interpersonal predictors associated with school success. The current investigation sought to evaluate how including these contextual variables affects Black collegians' postsecondary academic outcomes and whether these non-cognitive and context-specific factors should be included in the conversation on the educational performance of Black learners at historically White postsecondary settings.

This study's findings support the validity of focusing on more proximal variables of scholastic performance. Similar to other studies of African American collegians (Awad, 2007; Cokley, 2000a; Kuh et al., 2008), academic self-concept and academic engagement contributed significant unique variance to explaining cumulative scholastic performance among Black college students. These variables most closely correspond to traditional measures utilized to predict GPA, thus it is not surprising that they possess the strongest relationships with overall academic performance.

Consistent with prior scholarship, this study found that academic self-concept represented a significant predictor of GPA for this population (Awad, 2007; Cokley, 2002a). Indeed, after entering academic self-concept in the hierarchical regression

equation only a limited amount of additional variance in overall GPA was explained. Clearly, Black learners' academic self-beliefs are a powerful source for understanding their subsequent academic performance. Black students who possess a strong belief in their ability to excel in academic settings are more likely to garner higher scholastic marks. Students with high academic self-concept have likely experienced previous academic success, which provides them with a blueprint for tackling future academic challenges. These positive beliefs in their academic competence and previous scholastic achievement, in turn, contribute to a continuation of the behaviors associated with previous educational success. These findings align with research indicating the presence of a bidirectional relationship between academic self-concept and academic performance identified by the reciprocal effects model (Marsh & O'Mara, 2008).

Academic engagement (an antecedent of resilience) significantly predicted academic performance for Black collegians. Unexpectedly, academic engagement (as measured by the CRQ) was a negative predictor of GPA. After parceling out the variance contributed by academic self-concept, academic engagement appears to negatively impact overall GPA. These findings are inconsistent with a long line of research demonstrating engagement is a critical component of academic performance for college students (Astin, 1999; Kuh et al., 2008; Tinto, 1993). One explanation for this surprising finding is that the relationship between academic self-concept and GPA is so robust it consumes the variance that academic engagement would contribute to the prediction of GPA. Inspecting the beta weights, following the inclusion of academic engagement, a dramatic increase in academic self-concept's beta weight was witnessed: it climbs from β

= .45 to β = .61. This suggest that a suppressor effect may be present (MacKinnon, Krull, Lockwood, 2000).

Correlation analyses revealed that the CRQ and ASCS are highly correlated with each other (r = .74). Although it is expected that these two measures would tap into similar aspects of academic identity, the two constructs, particularly as measured by the CRQ, may not be distinct enough for academic engagement to remain a significant positive predictor of GPA in the presence of a robust predictor like academic self-concept. The use of an alternative measure of academic engagement in future studies would help to clarify this issue. An instrument that taps into more behavioral aspects of academic engagement may be appropriate. Additionally, the use of an established measure of resilience, such as the Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003), would be useful as well to tease out the specific effects of resilience for academic outcomes among Black college students. The CRQ has only been utilized in two prior published studies and may need additional psychometric work to validate its distinction from other similar constructs and instruments. Given the limited research on non-deficit variables, such as resilience, among college students in general and Black college students in particular, this work can add to our knowledge on the critical importance of resilience and engagement patterns for Black students attending historically White postsecondary schools.

Although academic self-concept and academic engagement enhanced the predictive power of GPA, the results of this study suggest that including psychosociocultural variables, like racial identity, has value. Racial centrality represented

the third and final variable that explained unique variance when predicting overall GPA. Although the research has been mixed on the influence of racial identity on academic performance (e.g., Awad, 2007; Lockett & Harrell, 2003), the current findings are consistent with Sellers et al.'s (1998) results showing that racial centrality positively correlated with cumulative GPA. In the current investigation, racial centrality was also positively associated with GPA. Black college students for whom race represents a central part of their self-concept and who are attending a historically White university may be motivated to dispel the negative myths regarding the educational skills of Black students and use academic achievement as a way to bolster their racial identity. For these race central students, performing well in school may be viewed as an important aspect of being Black, thus pushing these students to excel in this historically White educational space.

Social psychologists might also point to recent sociopolitical changes as another potential explanation for this study's findings that racial centrality adds significant variance to the prediction of academic outcomes for this sample. With the 2008 election of President Barack Obama, some commentators have argued we are now living in the Age of Obama. Indeed, some scholarship has found evidence of an "Obama Effect" whereby the election and presence of President Obama (and his African American family) in the White House provides a highly visible in-group racial role model for Black Americans (Marx, Ko & Friedman, 2009). These researchers found that this "Obama Effect" had a significant salubrious effect on Black students' academic performance in their study. Thus, for Black collegians for whom race comprises a core part of their

individual identity and self-concept, the election of President Obama—a self-identified Black man with an impressive academic pedigree--may enhance their positive feelings about their racial group membership and may bolster their desire to perform well academically, particularly for aspiring working-class and middle-class Black learners. His presence may provide evidence that a change has come and one's academic performance will be rewarded even for individuals that who had previously been excluded or marginalized due to their racial heritage.

Supporting these speculations, Fuller-Rowell, Burrow and Ong (2011) conducted a longitudinal study of the effect of President Obama's election on Black students racial identity (N = 324). Results of this study revealed that immediately following Obama's election, increases in private regard and racial centrality were witnessed. For Black students with higher levels of racial centrality, identity exploration increased immediately following the election. Five months after his election, increased private regard and lower racial centrality was found for those who engaged in identity exploration. These findings suggest that increased racial centrality may initially lead to more identity exploration for Black students. During this exploration, Black students may seek to refine their understanding of what it means to be Black and how this centrality affects their behavior. It is possible that this exploration contributes to an increased awareness of the need for academic excellence to attain success and acceptance in mainstream America. While these conclusions are speculative, it will be important to continue exploring the role of racial centrality among Black students post-President Obama's election. It should be noted that while the increase in prediction power when racial centrality is included is

quite small, it does remain a factor in Black students' academic outcomes (Sellers et al., 1998).

Considering that academic self-concept, academic engagement and racial centrality represented the only significant predictors of cumulative GPA in this study, exploratory post-hoc moderation analyses were used to probe the linkages between these relationships. These moderation analyses assessed whether individuals who were higher in academic engagement would have a stronger relationship between academic self-concept and GPA than individuals who had lower academic engagement. Results revealed that academic engagement did not moderate the relationship between academic self-concept and GPA. While somewhat surprising given the previous scholarship in this area (Kuh et al., 2008), the negative beta weight of academic engagement in the hierarchical regression suggests that academic engagement (as measured by the CRQ) does not affect the strong relationship between academic self-concept and GPA as might be predicted. It will be important to examine this relationship further in future studies using a more established resilience measure and/or using an instrument that assesses actual academic engagement behaviors rather than using academic engagement attitudes.

Post-hoc moderation analyses also examined whether individuals who have higher racial centrality would have a stronger relationship between academic self-concept and GPA than individuals who have lower racial centrality. Moderation analyses revealed that the relationship between academic self-concept and GPA was not moderated by racial centrality. It may be that given the distal relationship between racial centrality and GPA as well as the limited variance it accounted for in the regression racial centrality has

limited impact on altering the robust relationship between academic self-concept and GPA. These insignificant results challenge the notion that the presence of a prominent Black male (and his family) in the nation's leading position may not represent a panacea for the academic concerns that impact Black communities.

This study explored a second set of research questions related to predictors of academic self-concept. Given the strong relationship between academic self-concept and academic performance, it is important to shine a light on academic self-concept and its relationship with other educationally relevant variables. Similar to the findings on GPA, more proximal variables are most useful in predicting academic self-concept (Cokley & Awad, 2007). The study's results revealed that the antecedents of resilience (academic and social engagement) represent powerful predictors of academic self-concept over and above the variance accounted for by psychosociocultural influences, student-professor interactions and racial identity.

Considering the mixed results in the literature on the connection between racial centrality and academic identity among college students (Awad, 2007; Lockett & Harrell, 2003), the finding that racial centrality was a significant predictor of academic self-concept adds to the portion of the literature indicating that racial identity exert a positive influence on the academic performance of Black collegians (Cokley, 2001a; Cokley & Moore, 2007; Sellers et al., 1997). These findings suggest that among Black students who view race as a normative part of their lives, academic self-concept is higher. Perhaps more race central Black collegians are comfortable with their racial group membership and find that it enhances their academic self-beliefs. Additionally, possessing a positive

image of one's self as a racial being in a racially charged space may help to enhance one's academic confidence. Attending and excelling at an elite educational institution as one of a limited number of Black students may boost one's academic self-concept, particularly for those students who persist. For these students, it appears that being Black and academically competent are interconnected.

One important difference to note between the current study and previous ones (Cokley, 2001a; Cokley, McClain, Jones & Johnson, 2011; Cokley & Moore, 2007) is that there were no gender differences found in the relationship between academic self-concept and racial centrality. These unique findings may be related to sample differences. Cokley and Moore's study relied on Black collegians attending a southern, historically Black college, while Cokley et al. (2011) used high school students in a predominately Black setting. This study, in contrast, relied on Black students at predominately White postsecondary institutions. There may be important developmental differences in racial identity that enhance the effects of racial centrality on academic self-concept for college students as compared to Black high school students attending an economically disadvantaged school. Additionally, while Cokley (1999) found no institutional differences in racial centrality for Black students, his findings of gender differences in the relationship between racial centrality and academic self-concept did not include Black collegians at a historically White institution. This sampling difference may help to explain the discrepant findings between his study and the current one.

Academic self-concept also appears to be influenced by psychosociocultural and environmental variables. In the current investigation, perceptions of the university

environment, cultural congruity, racial centrality, and perceptions of caring faculty were added significant explanatory variance when predicting academic self-concept. While the psychosociocultural framework does not focus specifically on academic self-concept, these findings are consistent with predictions that flow from this model (e.g., Gloria & Castellanos, 2003; Gloria & Robinson Kurpius, 1996; Gloria & Rodriguez, 2000). Frequently, psychosociocultural influences are not addressed when assessing academic outcomes; however, it appears that perceiving the university environment positively and feeling a cultural match on campus can help to enhance academic self-concept. Reid and Radhakrishnan (2003) found that general satisfaction at the university was most related to how racial minority students felt they were treated as students rather than how they were treated as racial minorities. They showed that positive perceptions of the academic climate enhanced positive perceptions of the overall campus climate. Black collegians who feel welcomed on historically White campuses and believe that a sense of cultural fit on campus likely can focus on developing their academic abilities rather than dealing with racialized distractions and identity-based anxieties. Within this milieu where their academic credentials are not being scrutinized or their presence is not being challenged due to monocultural tendencies, Black students' academic self-beliefs can blossom (Bourke, 2010).

The finding that student-professor interactions, specifically caring interactions with faculty, enhance academic self-concept is consistent with prior scholarship (Cokley et al., 2006). Black students who endorse feeling cared for by their professors are likely able to flourish due to the vote of confidence they have received from a trusted authority

figure (Cohen, Steele & Ross, 1999). Professors who demonstrate that they care for Black students are often in high demand as they reassure Black students that their presence on campus matters and that their input is valuable. When combined with developmentally appropriate levels of challenge, caring attitudes from professors helps to ensure Black students reach their full potential by bolstering their academic self-confidence.

Even after accounting for the influence of racial identity, psychosociocultural factors and student-professor interactions, resilience (via academic and social engagement) contributed significant variance to predicting academic self-concept. This study is one of the first to explicitly link antecedents of resilience (academic and social engagement) with academic self-concept. Considering that academic self-concept represents an individual's perceptions of their competency in academic settings, we expect that academic and social engagement patterns should be strongly predictive of academic self-concept. Black students' engagement patterns likely give them an opportunity to test out their competency in various in-class and out-of-class settings. Academic and social engagement builds confidence in a learner's intellectual skills and their ability to handle various challenges associated with academic life (e.g., giving public presentations, conducting independent research, and writing academic papers), which likely enhances their subsequent academic self-beliefs.

Although the relationship between these engagement patterns and academic self-concept has received limited exposure in the current literature, the finding that academic and social engagement are critical components for Black students' academic self-concept is consistent with prior higher education findings on the role of engagement (Kuh et al.,

2008). Indeed, academic and social engagement may provide a strategy for handling the toxic effects of negative milieus (Reynolds, Sneva & Beehler, 2010). Black students who believe in their ability to be academically successful will be more engaged despite various challenges they may encounter. This engagement will garner them access to various forms of support that their less-engaged peers may not receive, thereby making persistence more likely. The reciprocal effects model affirms that higher performance aids in strengthening academic self-beliefs and stronger academic self-concept enhances academic performance.

Overall, these findings lend support to the proposition that the inclusion of psychosociocultural variables, interpersonal influences and engagement patterns affect academic identity and beliefs. It is apparent from the findings that Black students' perceptions of their campus, feelings of cultural fit on campus, and the quality of their interactions with faculty affect academic performance although the variance they explain is somewhat limited. Despite their minor contribution to explaining academic self-concept, it appears imprudent to ignore the influence these variables can have on the overall experience of Black students on predominately White campuses. Unfortunately, these external factors are often not discussed when examining how Black students perceive their academic beliefs, which in turn, has a powerful impact on subsequent academic performance. More scholarly attention must be devoted to this area.

The development of a model that incorporates these various influences on academic self-concept and achievement provides a contextualized account of the experiences of Black learners attending historically White institutions. It can link the

scholarship that either focuses exclusively on traditional academic outcomes (e.g., GPA) and the work that emphasizes the lived, cultural experiences of Black students in these settings. I propose the need to simultaneously examine race (racial centrality), space (perceptions of the university environment, student-faculty interactions), place (cultural congruity) and pace (resilience via academic and social engagement) influence academic achievement and academic self-concept among Black college students. Future studies will benefit from the broader examination of the linkages between these domains.

Limitations

Like all studies, the current investigation is not without limitations. First, the author relied on convenience sampling to garner a sample. While this practice is typical when attempting to gather enough participants from underrepresented groups, random sampling of participants is a preferable alternative since it aids in generalizing findings generated from the sample. Thus, generalizing the findings of this study to Black students who are not attending historically White colleges sans replication is inappropriate.

The cross-sectional nature of the study represents another limitation of the current study. Without random assignment of participants and the use of an experimental design, we cannot draw causal inferences nor definitively determine the causal flow between variables. Although they cannot determine causality, the use of more advanced statistical methods, such as path analysis or structural equation modeling (SEM), would help to better assess the direct and indirect relationships between the variables being studied and strengthen our confidence in the results (Martens, 2005). However, it would be important to incorporate additional variables that are more proximal to GPA as well as other

predictors of academic self-concept if SEM were utilized in future studies. The inclusion of at least three indicators for each of the psychosociocultural, interpersonal, and intrapersonal latent variables would be important to allow us to assess the relative contribution of these variables within a larger nomological network predicting academic self-concept and cumulative GPA (Streiner, 2006).

One issue related to the sample was that African American/Black, Caribbean, African and bi/multiracial students were combined into one group. Given the small number of individuals identifying as African (n = 41), Caribbean (n = 9) or bi/multiracial Black (n = 25), analyzing these groups separately was not statistically appropriate; however, the practice of lumping Black subgroups together can obscure the unique experiences of individuals in these groups and contribute to the misperception that individuals of African descent are a monolithic group. For example, some research suggests that foreign-born Black students' educational experiences differs from the native-born Blacks (Massey, Mooney & Torres, 2007). These differences in experiences likely affect their perceptions of campus, feelings of cultural congruity, student-faculty interactions, and their engagement patterns, potentially altering the validity of this study's findings for these students.

Furthermore, given the high educational attainment levels of African and Caribbean immigrants to the United States, these individuals and their offspring may have higher levels of academic performance and academic self-concept than native-born Blacks, which would affect the findings of the current study. While recruiting a sample composed exclusively of the different Black subpopulations would be cost-prohibitive

and time-consuming, it must be acknowledged that important intragroup differences may exist. Future research is needed to tease out these issues.

Additional research is needed that includes both resilience instruments as well as information about the stressors Black students face. The current study implicitly assumes that Black students are being resilient or bouncing back from negative experiences on the predominately White campus without explicitly assessing whether they perceive the White campus as problematic or endorse having problems on the campus. Some Black students may report having a neutral or even positive overall experience on the historically White campus. Although decades of research has shown Black students experience the historically White campus in a negative manner (Harper & Hurtado, 2007), these studies have not simultaneously assessed racial stressors and resilience patterns. For example, evaluating minority status stressors (Smedley, Myers & Harrell, 1993) would help to explicitly avoid this assumption of negative experiences and the need to demonstrate resilience against racism. Scholarship will benefit from including this information in future studies.

One final issue related to the sample's composition is the relatively large number of upper-division undergraduates and graduate students in the sample. As advanced students, one would expect academic self-concept to be stronger in this population since they have already persisted through several years of higher education. Thus, the relationship between academic self-concept and GPA may be overestimated for the total sample. Future studies could explore classification differences in academic self-concept using a more balanced distribution of students across each year to validate these findings.

Finally, the reliance on self-reporting of cumulative GPA represents another potential concern. While inflation of GPA is more common among underperforming students asked to self-report their performance (Caskie, Sutton & Eckhardt, 2014), most studies find that accuracy of self-reported GPA is not severely biased.

Future research

Building off these identified limitations, more studies on Black college students and academic self-concept are needed. In particular, more attention should be paid to identifying other predictors of academic self-concept among Black collegians given its connection to cumulative grade performance. Additionally, while it is well established that academic self-concept is a critical component in Black collegians' academic success, more attention to potential differences in academic self-concept among various Black subgroups would be helpful. For example, does the academic self-concept of African, Caribbean or biracial students significantly differ from African American collegians? Another related line of research can assess for potential differences in psychosociocultural influences, racial identity and student-professor interactions of these different Black subgroups attending both predominately Black and White educational institutions. Future scholarship will need to oversample these populations to ensure they are represented rather than being lumped into the Black category.

Well-designed longitudinal studies of Black collegians are needed. There is limited research on the developmental trajectory of academic self-concept across the college career. The findings from this study indicates that age and classification are positively correlated with academic self-concept. More research is needed on how

academic self-concept is affected across the years Black collegians are in school. Black students who fail to persist may have differences in their academic self-concept compared to those who eventually graduate from college. This research question needs additional inquiry. Comparisons can be made between Black undergraduates and graduates attending HBCUs and PWIs. These studies should also include a focus on psychosociocultural, student-professor influences as well as racial identity development across the postsecondary spectrum. This research would be useful for scholars studying college attrition as well as for stakeholders creating campaigns to increase recruitment, retention and graduation rates of Black students.

Another area pregnant with research possibilities is the study of resilience among Black college students. Considering the plethora of deficit-focused research on Black learners, more studies on resilience among Black collegians is direly needed. These future studies must be intersectional and examine how various dimensions of identity (race, gender, class, ability status, etc.) coalesce to affect academic outcomes. Psychological researchers can consider adding in a focus on how mental health status affects academic self-concept and academic performance of Black postsecondary students to supplement future scholarship in this area considering the devastating impact poor mental health has on academic outcomes (Kitzrow, 2003). The current study found that one antecedent to resilience (academic engagement) was a negative predictor of cumulative GPA, which is counter to previous research. Future research could explore this discrepant finding by utilizing different measures of resilience and academic engagement. The CD-RISC is a well-validated instrument that could be utilized examine

resilience generally. It would also be useful to directly assess students' engagement patterns using behavioral reports or by using a validated measure of student engagement, such as the Student Course Engagement Questionnaire (SCEQ; Handelsman, Briggs, Sullivan, & Towler, 2005). Using these different measures may help to clarify the relationship between resilience, academic engagement and academic performance.

In terms of psychosociocultural influences, more research is needed on how negative campus evaluations, low cultural congruity and poor student-faculty interactions affects Black collegians at historically White campuses. It would be also be interesting to examine how racial centrality and other dimensions of racial identity affects evaluations of the campus and perceptions of cultural congruity. Explorations of how pre-college racial composition of one's primary educational setting and neighborhoods affect evaluations of the campus environment and cultural congruity would be interesting contextual information to explore. Black students are entering our nation's colleges with more diverse experiences and these new experiences must be explored in relation to their outcomes. Finally, demographic trends indicate that the number of African, Caribbean and bi/multiracial students will increase in the coming years (Massey, Mooney & Torres, 2007). These populations will deserve closer scrutiny as their academic outcomes may be different than those of African Americans. Future studies would benefit from examining these issues for these Black subgroups.

Implications/Recommendations

Faculty Members

Several important implications can be drawn from this study's findings for three populations working in higher education: faculty members, student affairs professionals and college mental health professionals. For faculty members, these findings underscore the critical importance of academic and social engagement in academic outcomes (Museus, 2008). Professors who are able to offer various engagement opportunities, such as inviting students to visit during office hours, participate in research teams, and inviting undergraduates to attend local and national research conferences, can enhance the academic self-concept and academic performance of Black students. A supplementary benefit of these engagement opportunities is that Black students who are more academically and socially engaged can provide feedback to professors on ways to improve classroom involvement, cultural fit and evaluations of the campus climate for other Black students. Additionally, faculty need to be able to incorporate racial issues in their coursework and research given the importance of racial centrality to academic outcomes for Black students in this study. Attending to racial issues will be helpful to those Black students high in racial centrality as well as exposing other students to the racial and cultural issues relevant to Black communities. Chang (2002) found that exposure to diversity is beneficial for both students of color and White American collegians.

Another important implication of these findings for faculty is the importance of psychosociocultural influences and student-faculty relationships for African American

college students. Although the variance explained by these variables is comparatively small, these external influences are important for the academic success of Black students. Faculty members can play their part by seeking out opportunities for diversity and social justice trainings. In theory, these trainings will raise awareness of the unique racial challenges Black students encounter on historically White campuses. Professors can be mindful to be caring and respectful in their interactions with these students (Olson & Carter, 2014). Olson and Carter outlined the following behaviors that characterize caring: projection of welcoming demeanor, fostering openness and accessibility (e.g., office hours, physical arrangement of furniture), demonstrate unconditional positive regard, setting high but achievable expectations, instilling confidence, show interest in students, act as appropriate adult role model, and provide consistent and detailed feedback to students' work in a timely manner.

Faculty can monitor the climate fostered in their classrooms and their departments for racial bias and make a conscientious effort to fairly represent the diverse array of students at the campus in their lecture materials and course examples. These efforts represent one mechanism to improve campus climate, increase feelings of cultural fit and enhance student-professor interactions. By working to eliminate these extraneous distractors, Black students can attend to the business of obtaining their education. Additionally, these changes may help to improve both the quantity and quality of the interactions Black students and their professors have.

Student Affairs Professionals

For student affairs professionals, these findings underscore the importance of identifying and highlighting engagement opportunities. Student affairs professionals must ensure Black students are aware of various engagement opportunities available on the campus. They can provide programming that facilitates both in class and out-of-class engagement opportunities, particularly out-of-class opportunities that will enhance academic self-concept. These professionals must be cognizant of the importance of both race and non-race specific engagement opportunities considering the influence of racial centrality for some Black students. Some scholars have cautioned against race-exclusive spaces contending that they diminish Black students' interactions with other students and encourage racial segregation and balkanization (Sidanius, Van Laar, Levin & Sinclair, 2004). While acknowledging the potential legitimacy of these concerns, student affairs professionals must be open to the potential value and utility of various engagement practices, including race-specific activities. This type of attitude provides a non-deficit approach for Black students attending a predominately White college to maintain spaces that provide a feeling of racial safety, comfort and solitude.

Campus cultural centers often provide the venue for these safe spaces. Rather than completely dismantling all race-specific groups, student affairs professionals can work to improve the campus climate and create these safe spaces for Black students across campus. Establishing strategic partnerships with campus cultural centers, student affairs workers can offer diversity trainings to students, faculty and staff to achieve this end. They can also ensure that mainstream campus venues provide culturally relevant

programming and activities for their Black students. These efforts indicate the college's attitude toward inclusiveness and can enhance perceptions of campus climate and cultural congruity for students of color.

Additionally, establishing a central reporting bureau where students can report racist behaviors experienced or observed by faculty, staff or fellow students may be helpful. On-campus dialogues addressing the issues identified via this hotline could be a way to demonstrate a commitment to addressing campus climate issues. These findings also remind student affairs professionals of the importance of regular evaluation efforts of campus climate for all students. These evaluations should incorporate items that assess for cultural and racial compatibility. A welcoming environment for all students must be fostered by a collaborative effort between student affairs professionals, faculty, staff and students. Student affairs professionals must problematize the colorblindness rhetoric on many campuses, particularly considering the preponderance of evidence suggesting that students of color experience the campus in a racial manner. Continuing to privilege White students' comfort by avoiding race-based conversations will maintain current racialized perceptions on college campuses (Leonardo & Porter, 2010).

Student affairs professionals, in conjunction with the university's administration team, must be committed to addressing the needs of Black students in their settings. Sans a genuine commitment to improving the academic and social campus climate, continued reports of gendered racism, microaggressions and cultural missteps are inevitable. A systemic approach to improving the campus milieu will be required to affect sustained change.

Mental Health Professionals

Although the focus of this study is on academic outcomes, mental health professionals on college campuses can find value in the results of this study as well. Prior research indicates the important role psychological well-being can play on salubrious academic outcomes (Kitzrow, 2003). Accordingly, many college counseling centers are shifting to a holistic and preventative approach to college mental health (Kitzrow). This preventative approach is necessary given the increased number of students entering college with a wide range of mental health concerns.

Eschewing the medical model's pathology-focused approach to clinical intervention, Aaron Antonovsky's (1987) work on salutogenesis provides a useful framework for college mental health providers and seamlessly aligns with the developmental and preventative lens being utilized in these settings (Becker, Glascoff & Felts, 2010). Derived from interviews with female Holocaust survivors, Antonovsky (1987) found that these survivors had survived and thrived despite their experience of extreme racial/ethnic oppression. Antonovsky's salutogenic model attends to factors that support health and well-being and fits with a preventative and developmental philosophy to college counseling (Lindström & Eriksson, 2006). It also concerns itself with the relationship between mental health and coping strategies.

With Antonovsky's salutogenic model in mind, college counselors can connect the findings from this study to their clinical work with Black collegians. Antonovsky would encourage college counseling center professionals to take a strengths-oriented approach to counseling and explore coping strategies the client is utilizing in their daily

lives. Given the importance of the antecedents of resilience in this study, college center counselors can inquire about Black students' engagement on campus, particularly for those students presenting with depression and anxiety. Behavioral activation is a core component of treating depression and anxiety in a short-term counseling setting like a college counseling center (Burns, 2008). College counseling center workers must be also be aware of the research detailing the negative perceptions of White college campus found among Black students. Students may be affected by negative perceptions of campus and cultural congruity or negative interactions with professors, which will impact depression or anxiety. Being able to address these racial concerns in a direct manner is critical as well as inquiring about how Black students have dealt with similar challenges previously. Counselors can work with Black students to draw on these strengths even in the midst of a racially antagonistic milieu.

On a broader level, Antonovsky's work on salutogenesis is best suited for college counselor centers conducting outreach and consultation for the campus in partnership with faculty members, student affairs professionals and upper-level administrators. Given his training as a medical sociologist, Antonovsky's work concerns itself with public health (Lindström & Eriksson, 2006). Other scholars have encouraged us to view college mental health concerns as a public health problem (Kitzrow, 2003). Utilizing a salutogenic model, mental health professionals on college campuses would seek to identify and enhance health-promoting behaviors on campus. These efforts might include a campaign to eliminate and respond acts of racial intolerance on campus. These efforts seek to draw upon the strengths of on-campus groups and improve the psychological

well-being and functioning of all involved parties. Working with cultural centers, counseling center professionals can offer workshops that specifically address the unique cultural concerns of Black students. These workshops can be designed to focus on the issues faced by Black women compared to Black men since their experiences will be different in certain aspects. Offering specific groups for these students may provide a therapeutic space for Black students to access clinical services. Finally, ensuring that the counseling center staff represents the diverse student body they serve would be beneficial.

Conclusion

Collectively, the efforts of faculty, student affairs professionals, staff and administration are needed to continue making our nation's postsecondary institutions a welcoming place for Black students to learn and grow. These recommendations address the academic and social environments that must be addressed by these various parties. Despite the exclusionary origins of the historically White postsecondary institution, we now have an opportunity—and obligation—to ensure that optimal conditions for academic excellence are fostered for all students. If we achieve this end, not only will Black collegians benefit but our entire nation will reap the harvest of making this long overdue investment.

Tables

Table 1

Intercorrelations for grade point average, academic self-concept, university environment, cultural congruity, perceptions of caring faculty, respectful interactions with faculty, academic and social engagement and racial centrality.

Variable	1	2	3	4	5	6	7	8	9
1. GPA	—								
2. Academic self-concept	.49*	—							
3. University environment	.10	.39*	—						
4. Cultural congruity	-.04	.31*	.58*	—					
5. Academic engagement	.26*	.74*	.39*	.32*	—				
6. Social engagement	.10	.33*	.38*	.48*	.55*	—			
7. Caring faculty	.17	.40*	.48*	.26*	.47*	.43*	—		
8. Respectful faculty	-.00	.32*	.70*	.57*	.40*	.39*	.48*	—	
9. Racial centrality	.30*	.26*	-.07	-.29*	.25*	.10	.25*	-.03	—

*$p < .05$ (Bonferroni adjusted p-value, $p < .003$)

Table 2

Descriptive statistics and internal reliability for grade point average, academic self-concept, university environment, cultural congruity, perceptions of caring faculty, respectful interactions with faculty, academic and social engagement and racial centrality.

Variable	Range	M	SD	α
1. GPA	0.00-4.00	3.21	.54	—
2. Academic self-concept	1-4	111.42	15.89	.94
3. University environment	1-7	70.05	11.82	.84
4. Cultural congruity	1-7	65.07	12.83	.84
5. Academic engagement	1-5	74.47	11.34	.93
6. Social engagement	1-5	32.11	4.86	.80
7. Caring faculty	1-7	21.04	5.31	.87
8. Respectful interactions	1-7	48.29	9.25	.93
9. Racial centrality	1-7	37.98	10.42	.86

Table 3

Hierarchical Multiple Regression Analysis for GPA

Variable	B	Standard Error B	β	Adjusted R^2
Step 1				.053
Classification	.137	.048	.337**	
Age	-.056	.058	-.113	
Mother's Education	.029	.023	.085	
Step 2				.246
Classification	.090	.043	.220	
Age	-.056	.052	-.114	
Mother's Education	.024	.020	.070	
Academic Self-Concept	.016	.002	.455**	
Step 3				.263
Classification	.086	.043	.210	
Age	-.051	.051	-.104	
Mother's Education	.023	.020	.068	
Academic Self-Concept	.021	.003	.612**	
Academic Engagement	-.010	.004	-.212*	
Step 4				.291
Classification	.068	.042	.167	
Age	-.054	.050	-.110	
Mother's Education	.025	.020	.075	
Academic Self-Concept	.020	.003	.594**	
Academic Engagement	-.011	.004	-.236*	
Racial Centrality	.010	.003	.188*	

*p < . 05; **p < .01

Table 4
Hierarchical Multiple Regression Analysis for Academic Self-Concept

Variable	B	Standard Error B	β	Adjusted R^2
Step 1				.053
Classification	3.076	1.38	.258**	
Age	.030	1.67	.002	
Mother's Education	.336	.663	.034	
Step 2				.085
Classification	2.432	1.377	.204	
Age	-.076	1.644	-.005	
Mother's Education	.399	.652	.040	
Racial Centrality	.303	.105	.199**	
Step 3				.285
Classification	1.974	1.220	.165	
Age	-.378	1.644	-.026	
Mother's Education	.188	.578	.019	
Racial Centrality	.395	.102	.259***	
University Environment	.262	.118	.195*	
Cultural Congruity	.314	.097	.253***	
Caring Faculty	.482	.217	.161***	
Respectful Faculty	-.056	.151	-.032	
Step 4				.589
Classification	1.670	.925	.140	
Age	-.935	1.117	-.065	
Mother's Education	.166	.439	.017	
Racial Centrality	.191	.080	.125**	
University Environment	.174	.090	.129	
Cultural Congruity	.237	.080	.192**	
Caring Faculty	.109	.173	.036	
Respectful Faculty	-.191	.115	-.111	
Academic Engagement	1.000	.081	.713***	
Social Engagement	-.616	.192	-.188**	

*p < .05; **p < .01; ***p < .001

Table 5

Moderation Analyses for GPA, Academic Self-Concept and Academic Engagement

Step/Variable	B	SE B	β	p	Adjusted R^2
Step 1					.237
Academic Self-Concept	.315	.048	.585	.001	
Academic Engagement	-.074	.050	-.134	.137	
Step 2					.233
Academic Self-Concept	.313	.051	.583	.001	
Academic Engagement	-.073	.053	-.131	.175	
Academic Self-Concept x Academic Engagement	.002	.027	.006	.928	

Table 6

Moderation Analyses for GPA, Academic Self-Concept and Racial Centrality

Step/Variable	B	SE B	β	p	Adjusted R^2
Step 1					.266
Academic Self-Concept	.232	.033	.435	.001	
Racial Centrality	.107	.033	.197	.002	
Step 2					.264
Academic Self-Concept	.239	.034	.448	.001	
Racial Centrality	.108	.033	.199	.001	
Academic Self-Concept x Racial Centrality	-.027	.034	-.050	.424	

Appendices

Appendix A: Study Cover Letter

Title of Study: The Influence of Psychosociocultural Factors on the Academic Self-Concept and Academic Achievement of African American Collegians

Investigator: Samuel Beasley, M.A. (University of Texas at Austin)

INTRODUCTION

The purpose of this study is to better understand how African American students' unique cultural experiences at predominantly white universities impact their academic self-beliefs and academic performance. Your participation in the survey will contribute to a better understanding of the psychological, social and cultural experiences of African American collegians attending these educational institutions and how these experiences influence academic outcomes in this population. This information can then be used by various educational stakeholders to improve the experiences and outcomes of this group. Participants must be 18 years old or older to participate in the study.

DESCRIPTION OF PROCEDURES

Participation in this research is completely voluntary. It will take approximately 20-30 minutes of your time to complete the questionnaire. You may decline to answer any question and you have the right to withdraw from participation at any time without penalty. Withdrawal will not affect your relationship with The University of Texas in anyway. If you would like to receive credit but do not want to participate in this study, please talk to your instructor about completing the alternative assignment. The alternative assignment should be equivalent in time and effort that would be needed to participate in this study.

RISKS

Risks to participants are considered minimal. The potential risk to the participants is no greater than everyday life. There will be no cost for participating, nor will you benefit directly from participating.

COSTS AND COMPENSATION

For your time and effort in participation, you can enter a drawing for one of ten $10 Visa gift cards (the odds of winning are about 1 in 20). The drawing will be held after the completion of data collection. The winner will be notified via email. Participants' email addresses will be stored in a separate database from their responses. Upon completion of the study, the email addresses will be destroyed.

CONFIDENTIALITY

Records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available. Identification numbers associated with email addresses will be kept during the data collection phase for tracking purposes only. A limited number of research team members will have access to the data during data collection. Personally identifiable information will not be connected with the final dataset. If the results are published, your identity will remain confidential.

You will be asked to enter your name and email address to register for this drawing, this information will not be stored with your response to the survey. The mailing information for receiving a $10 gift card will be stored separately from the survey answers. The contact information for joining the drawing will be destroyed once a $10 gift cards are picked up.

QUESTIONS OR PROBLEMS

The study is being conducted by Samuel Beasley, Counseling Psychology, Department of Educational Psychology of The University of Texas at Austin, 1 University Station D5800, Austin, TX 78712. If you have any questions or would like me to email another person for your institution or update your email address, please send an email to SBeasley20@utexas.edu or call Samuel Beasley at (270) 304-5747. You may also request a hard copy of the survey using the above contact information.

This study has been processed by the Office of Research support. If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact - anonymously, if you wish – the Office of Research Support by phone at (512) 471-8871 or email at orsc@uts.cc.utexas.edu.

IRB Number: 2013-11-0131

Clicking on the "next" button below will bring you to the survey and indicate that you have read the information contained in this form and agree to participate in this study.

Appendix B: Recruitment Statement

African American Collegians' Psychosociocultural Experiences

Higher education scholars acknowledge that African American college students experience unique psychological, social and cultural challenges on predominately White campuses. Yet, there is limited empirical exploration of how these distinctive psychosociocultural issues influence Black students' academic self-concept or beliefs and their academic performance. This study seeks to fill this gap in the extant literature. I am asking for your help in recruiting African American or Black students who are willing to share about their experiences at predominantly white universities. I hope to improve our understanding of the unique psychosociocultural experiences of Black college students. Interested participants should email the principal investigator at SBeasley20@utexas.edu to learn more about the study.

This online study will take approximately 20-30 minutes to complete. Upon completion of the study, participants can enter their names in a drawing for one of 10 $10 Visa gift cards. All participants are also eligible to receive a summary of the study results by e-mail once the study is complete.

Thank you for your help in identifying potential participants for this study.

Principal Investigator:

Samuel Beasley

Department of Educational Psychology, Counseling Psychology

University of Texas at Austin

Phone: (270) 304-5747

SBeasley20@utexas.edu

Appendix C: Debriefing Form

Debriefing Form

You have just participated in a study designed to better understand how African American students' unique psychosociocultural experiences at predominantly white universities can impact their academic self-beliefs or self-concept and academic achievement. More specifically, this study aims to explore whether perceptions of the university environment, cultural congruity or fit on campus, interactions with professors, racial identity, and academic resilience influence the academic self-beliefs and academic performance of Black college students. If you are interested in learning more about this research study, feel free to contact Samuel Beasley at SBeasley20@utexas.edu.

I understand that you may want to take extra precautions to ensure no one else can access your responses to the survey. Below are two methods that will help keep anyone else from accessing your survey answers.

Suggestions on how to further PROTECT YOUR CONFIDENTIALITY:

1. After completing the survey, be sure to close the browser window. This will ensure that other individuals will not have access to your survey responses by pressing the "back" button.
2. Be sure to delete temporary internet files. This will ensure that other individuals will not be able to access your survey responses if subsequent participants were to open the webpage (using the same computer) to complete the survey.

Thank you for your participation in this important research!

Appendix D

Demographic Questionaire

1. Which of the following best describes your race/ethnicity?
    a. African American
    b. African (Please specify country of origin.)
    _____
    c. Caribbean (Please specify.)
    _____
    d. Multiracial or Biracial (Please specify.)
    _____
    e. Other (Please specify.)
    _____

2. Which of the following best describes your gender?
    a. Male
    b. Female
    c. Transgender
    d. _____

3. Your current classification/class standing can be best described as:
    a. Freshman
    b. Sophomore
    c. Junior
    d. Senior
    e. Graduate Student
    f. Other _____

4. What is your cumulative college GPA? _____

5. Write in your age. _____

6. Please describe the racial composition of your high school:
    a. Mostly Black
    b. About half Black
    c. Mostly White
    d. About half White
    e. Mostly Hispanic

f. About half Hispanic/Latino
g. Other

_____

7. Please describe the racial composition of your neighborhood growing up:
    a. Mostly Black
    b. About half Black
    c. Mostly White
    d. About half White
    e. Mostly Hispanic
    f. About half Hispanic/Latino
    g. Other

    _____

8. What do you consider your socioeconomic status to be?
    a. Working class
    b. Middle class
    c. Upper middle class
    d. Upper class
    e. Other _____

9. Think of a ladder with 10 steps representing where people stand in the United States. At step 10 are people who are the best off – those who have the most money, the most education, and the most respected jobs. At step 1 are the people who are worst off – those who have the least money, least education, and the least respected jobs or no job. Where would you place yourself on this ladder?

    _____

10. Which of the following best describes your mother's level of educational attainment:
    a. Did not finish high school
    b. High school diploma/GED
    c. Some college
    d. Associate Degree (A.A., A.S.)
    e. Bachelor's Degree (B.A., B.S.)
    f. Master's Degree (M.A., M.S.)
    g. Advanced Degree (Ph.D., M.D., Psy.D., J.D., etc.)

11. Which of the following best describes your father's level of educational attainment:
    a. Did not finish high school
    b. High school diploma/GED
    c. Some college
    d. Associate Degree (A.A., A.S.)
    e. Bachelor's Degree (B.A., B.S.)
    f. Master's Degree (M.A., M.S.)
    g. Advanced Degree (Ph.D., M.D., Psy.D., J.D., etc.)

12. Please provide your primary academic major:
    _____

13. Please list your minor(s):

    _____

14. How many extracurricular activities do you participate in (e.g., fraternities, sororities student organizations, intramural sports, Black Student Association (BSA), etc.)?
    _____

15. Please briefly list the extracurricular activities in which you participate:
    _____

Appendix E

Academic Self-Concept Scale (ASCS)

College Attitude Survey

Listed below are a number of statements concerning school-related attitudes. Rate each item as it pertains to you personally. Base your ratings on how you feel most of the time. Use the following scale to rate each statement:

Strongly Disagree	Disagree	Agree	Strongly Agree
A	B	C	D

INDICATE YOUR RESPONSE BY CIRCLING THE APPROPRIATE LETTER. Be sure to answer all items. Also try to respond to each item independently, do not be influenced by your previous choices.

1. Being a student is a very rewarding experience.	A	B	C	D
2. If I try hard enough, I will be able to get good grades.	A	B	C	D
3. Most of the time my efforts in school are rewarded.	A	B	C	D
4. No matter how hard I try I don't do well in school.	A	B	C	D
5. I often expect to do poorly on exams.	A	B	C	D
6. All in all, I feel I am a capable student.	A	B	C	D
7. I do well in my courses given the amount of time I dedicate to my studying.	A	B	C	D
8. My parents are not satisfied with my grades in college.	A	B	C	D
9. Others view me as intelligent.	A	B	C	D
10. Most courses are very easy for me.	A	B	C	D
11. I sometimes feel like dropping out of school.	A	B	C	D
12. Most of my classmates do better in school than I do.	A	B	C	D
13. Most of my instructors think that I am a good student.	A	B	C	D
14. At times I feel college is too difficult for me.	A	B	C	D

15. All in all, I am proud of my grades in college.	A	B	C	D
16. Most of the time while taking a test I feel confident.	A	B	C	D
17. I feel capable of helping others with their classwork.	A	B	C	D
18. I feel teachers' standards are too high for me.	A	B	C	D
19. It's hard for me to keep up with my classwork.	A	B	C	D
20. I am satisfied with the class assignments that I turn in.	A	B	C	D
21. At times I feel like a failure.	A	B	C	D
22. I feel I don't study enough before a test.	A	B	C	D
23. Most exams are easy for me.	A	B	C	D
24. I have doubts that I will do well in my major.	A	B	C	D
25. For me, studying hard pays off.	A	B	C	D
26. I have a hard time getting through school.	A	B	C	D
27. I am good at scheduling my study time.	A	B	C	D
28. I have a fairly clear sense of my academic goals.	A	B	C	D
29. I'd like to be a much better student than I am now.	A	B	C	D
30. I often get discouraged about school.	A	B	C	D
31. I enjoy doing my schoolwork.	A	B	C	D
32. I consider myself a very good student.	A	B	C	D
33. I usually get the grades I deserve in my courses.	A	B	C	D
34. I do not study as much as I should.	A	B	C	D
35. I usually feel on top of my work by finals week.	A	B	C	D
36. Others consider me a good student.	A	B	C	D
37. I feel that I am better than the average college student.	A	B	C	D

38. In most of the courses, I feel that my classmates are better prepared than I am.	A	B	C	D
39. I feel that I don't have the necessary abilities for certain courses in my major.	A	B	C	D
40. I have poor study habits.	A	B	C	D

Appendix F

University Environment Scale (UES)

For each of the following items, indicate the extent to which you have experienced the feeling or situation at your current school. Use the following ratings:

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Agree	Strongly Agree

1. Class sizes are so large that I feel like a number.	1	2	3	4	5	6	7
2. The library staff is willing to help me find materials/books.	1	2	3	4	5	6	7
3. University staff have been warm and friendly.	1	2	3	4	5	6	7
4. I do not feel valued as a student on campus.	1	2	3	4	5	6	7
5. Faculty have not been available to discuss my academic concerns.	1	2	3	4	5	6	7
6. Financial aid staff has been willing to help me with financial concerns.	1	2	3	4	5	6	7
7. The university encourages/sponsors ethnic groups on campus.	1	2	3	4	5	6	7
8. There are tutoring services available to me on campus.	1	2	3	4	5	6	7
9. The university seems to value minority students.	1	2	3	4	5	6	7
10. Faculty have been available for help outside of class.	1	2	3	4	5	6	7

11. The university seems like a cold, uncaring place to me.	1	2	3	4	5	6	7
12. Faculty have been available to help me make course choices.	1	2	3	4	5	6	7
13. I feel as if no one cares about me personally on this campus.	1	2	3	4	5	6	7
14. I feel comfortable in the university environment.	1	2	3	4	5	6	7

Appendix G

Cultural Congruity Scale (CCU)

For each of the following items, indicate the extent to which you have experienced the feeling or situation at your current school. Use the following ratings:

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Agree	Strongly Agree

1. I feel that I have to change myself to fit in at school.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
2. I try not to show the parts of me that are "ethnically" based.	1	2	3	4	5	6	7
3. I often feel like a chameleon, having to change myself depending on the ethnicity of the person I am with at school.	1	2	3	4	5	6	7
4. I feel that my ethnicity is incompatible with other students.	1	2	3	4	5	6	7
5. I can talk to my friends at school about my family and culture.	1	2	3	4	5	6	7
6. I feel that I am leaving my family values behind by going to college.	1	2	3	4	5	6	7
7. My ethnic values are in conflict with what is expected at school.	1	2	3	4	5	6	7
8. I can talk to my family about my friends from school.	1	2	3	4	5	6	7
9. I feel that my language and/or appearance make it hard for me to fit in with other students.	1	2	3	4	5	6	7
10. My family and school values often conflict.	1	2	3	4	5	6	7

11. I feel accepted at school as an ethnic minority.	1	2	3	4	5	6	7
12. As an ethnic minority, I feel as if I belong on this campus.	1	2	3	4	5	6	7
13. I can talk to my family about my struggles and concerns at school.	1	2	3	4	5	6	7

Appendix H

Student-Professor Interaction Scale (SPIS)

Instructions: Listed below are a number of items concerning how you perceive your interactions with professors. Read each item and indicate to what degree it reflects how you feel **most of the time**, using the 7-point scale below. Base your responses on your interactions with college professors.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Agree	Strongly Agree

1. I feel that one or more professors are supportive of me.	1	2	3	4	5	6	7
2. I believe that there is at least one professor who cares about my well-being.	1	2	3	4	5	6	7
3. I believe there is a professor who is concerned about my future.	1	2	3	4	5	6	7
4. I feel that professors generally care about me.	1	2	3	4	5	6	7
5. Professors show respect for all students in the classroom.	1	2	3	4	5	6	7
6. My professors are clear about expectations regarding coursework.	1	2	3	4	5	6	7
7. When I interact with my professors I feel s/he truly listens to me.	1	2	3	4	5	6	7
8. My professors are alert and attentive when I approach them.	1	2	3	4	5	6	7
9. When I interact with my professors I feel s/he cares about my question or problem.	1	2	3	4	5	6	7
10. Professors show respect for ethnic minority students.	1	2	3	4	5	6	7
11. When I interact with my professors I feel understood.	1	2	3	4	5	6	7

12. My professors value my contributions and opinions.	1	2	3	4	5	6	7
13. My professors seem comfortable interacting with students outside of their racial/ethnic group.	1	2	3	4	5	6	7
14. The quality of my relationships with professors impacts my academic performance.	1	2	3	4	5	6	7
15. I work harder to succeed in a class if I know my professor genuinely cares about me.	1	2	3	4	5	6	7
16. I think a positive relationship with a professor would enhance my experience at this school.	1	2	3	4	5	6	7

Appendix I

College Resilience Questionnaire (CRQ)

Please indicate how accurately each statement describes you with respect to your own academic success. Use the five-point scale below. If the statement is always true, write a 5 in the back line to the left of the statement. If the statement is never true, write a 1 in the blank space.

1	2	3	4	5
Always False	Usually False	Neutral	Usually True	Always True

1. I never give up at school.	1	2	3	4	5
2. I actively pursue my educational goals.	1	2	3	4	5
3. I have always had good friends to talk to at school.	1	2	3	4	5
4. I am a self-starter on my homework.	1	2	3	4	5
5. School excites me.	1	2	3	4	5
6. I am very optimistic about my education.	1	2	3	4	5
7. I have a high self-esteem about school.	1	2	3	4	5
8. I learn from tests.	1	2	3	4	5
9. I expect to do well in college.	1	2	3	4	5
10. I make friends in classes easily.	1	2	3	4	5
11. I make the best of each educational experience.	1	2	3	4	5
12. I know how to get homework done.	1	2	3	4	5
13. I am able to connect with others at college.	1	2	3	4	5
14. I get along well with others at school.	1	2	3	4	5

15. I am a good problem solver on academic things.	1	2	3	4	5
16. I make good things happen in my education.	1	2	3	4	5
17. Nothing blocks my educational path for long.	1	2	3	4	5
18. I like to take charge of my education.	1	2	3	4	5
19. There are people in school who really believe in me.	1	2	3	4	5
20. I adapt easily to new classes.	1	2	3	4	5
21. I have a lot of faith in how I'll do at school.	1	2	3	4	5
22. I have someone who encourages me.	1	2	3	4	5
23. I keep going when things are tough in classes.	1	2	3	4	5
24. I feel difficult classes have made me a stronger person.	1	2	3	4	5
25. I like the student I have become.	1	2	3	4	5
26. My family encourages me to continue my college education.	1	2	3	4	5
27. My close friends encourage me to continue my education.	1	2	3	4	5

Appendix J

Multidimensional Inventory of Black Identity (MIBI)

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree

1. Overall, being Black has very little to do with how I feel about myself.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
2. In general, being Black is an important part of my self-image.	1	2	3	4	5	6	7
3. My destiny is tied to the destiny of other Black people.	1	2	3	4	5	6	7
4. Being Black is unimportant to my sense of what kind of person I am.	1	2	3	4	5	6	7
5. I have a strong sense of belonging to Black people.	1	2	3	4	5	6	7
6. I have a strong attachment to other Black people.	1	2	3	4	5	6	7
7. Being Black is an important reflection of who I am.	1	2	3	4	5	6	7
8. Being Black is not a major factor in my social relationships.	1	2	3	4	5	6	7

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Vita

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